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ORIGINAL LECTURES.

ANOMALOUS DISLOCATION AT THE HIP-JOINT OCCURRING DURING PARTURITION.

A Clinical Lecture.

BY STEPHEN SMITH, A.M., M.D.,

PROFESSOR OF CLINICAL SURGERY IN THE UNIVERSITY MEDICAL COLLEGE, NEW YORK.

GENTLEMEN: The subject for examination and study to-day has a twofold interest, viz.: 1. The form of dislocation of the femur at the hip-joint is anomalous. 2. The cause of the dislocation is unusual. Both of these facts will be apparent on reciting the history of the case as it has been given me, and on examining the present position and condition of the limb.

The patient is about thirty years old, mother of three children, short of stature, and strongly built. She states that when about to be confined of her second child, she called her medical attendant on the occurrence of the first pains. He expressed great desire to have her labor expedited in order to relieve him, that he might attend another case. Accordingly, he ruptured the membranes, and encouraged her to force her pains. The labor became very active, the child advanced rapidly, and during the pains he threw his whole weight upon the right thigh, which was strongly flexed upon the body, and the leg upon the thigh. The accoucheur was a large and powerful man, and, during the expulsive stage, she recollects to have suffered from the force he exerted upon the thigh in counteracting her efforts, and the extreme flexion to which the thigh was subjected.

After the labor she experienced only the usual soreness of the limbs consequent upon such muscular efforts, and she continued to do well until the fourth day, when she sat up in bed. While attempting to leave the bed on the eighth day, she was seized with violent pain in the right thigh and leg. It extended to the ankle at first, but finally became fixed in the thigh and knee.

At an early period the foot began to be everted, and the leg flexed upon the thigh. The eversion of the foot gradually increased, and the pain was so great that she had to be relieved by hypodermic injections of morphine. She could not from the first move the limb, or sit up straight in bed. She continued to be confined to her bed for three months, and several times a day received the morphine injections for the relief of her pain.

After this time she began to be removed from her bed, and made every possible effort to walk and move around her house. The most noticeable features of her case, as she describes it, after she began to walk about the house were, eversion of the foot to a right angle, a hollow on the posterior part of the hip over the joint, and a movable, hard tumor anterior to the joint.

Three years have now elapsed since the accident

from which she dates her troubles. Mean time, she has been once confined, and is again far advanced in pregnancy.

We will now examine the limb carefully, and determine, as far as possible, what is the nature of the deformity. And first, we should learn as much as possible by inspection, before we attempt manipulation. As she lies on the table, the right leg appears markedly shortened; the foot is not only turned outward, but actually lies on its external margin; the patient has lost the power of inverting it. On placing her upon her feet, the deformity appears more marked. The right leg is now apparently very much shortened; the foot is naturally placed at right angles with the other, the heel of the right opposing the arch of the left. When she walks there is no change in the relations of the feet, and the difference in the length of the limbs becomes more apparent by the painful limp which is developed.

On placing her again in the recumbent position, for manipulation of the limb, we find the most marked feature of flexion to be the development of a movable tumor, just below and rather internal to the anterior superior spinous process of the ilium. On grasping this tumor, it is found to be hard, round, about the size of a small orange, and movable only when the limb is rotated. On more careful manipulation, it is perfectly evident that this mass is the head of the thigh-bone—displaced to this unusual position. Measurements can now be made to verify the diagnosis, and determine the amount of shortening. Placing the left limb as nearly as possible in the position of the right—for, as you can see, the left cannot be made to assume the same exact position—we first measure from the anterior superior spines to the tip of the internal malleoli, and find a difference in favor of the left limb of two inches and a half. There is, then, very marked shortening of the right limb, as regards its relation to the joint. But there is another measurement which we can make to determine whether the entire length of the right limb—regarding this tumor as the head of the femur—is shortened. I can just distinguish the upper extremity of the trochanter major on the right side, and taking this projection as the upper point on the two sides, I find no very perceptible difference in the length of the two limbs.

Grasping the tumor firmly when she steps, it is found that it descends markedly when she raises her foot, and then ascends as she brings her weight to bear upon the limb. In fact, when she stands upon the right leg, the tumor becomes very prominent and well defined as the head of the femur. The conclusion at which I arrive is this, viz., the patient is now suffering from an old luxation of the head of the femur from the hip-joint, the displacement being in the anomalous position under the anterior superior spine of the ilium. At that point where the curve of the ilium gives some support to the head, a new joint forms, which in time serves a very good purpose in the ordinary anomalous dislocation. New bone arches over and around the head, especially on the

upper and posterior portions, and a cup-shaped cavity results, having the appearance and functions of the original acetabulum. In this case, however, it is doubtful if any such rudimentary joint will, or indeed can form, owing to the absence of a bony surface on which the head of the bone can rest.

The question of treatment can be readily answered. Replacement is impossible in her case. No form of operation can give useful results. There is but one method of relieving her disabilities, and that is by the use of the ordinary hip-splint. The value of this splint to her would be that it would enable her to walk upright, and the weight of the body would be transferred from the leg to the splint. Locomotion would then be comparatively easy, and eventually a new joint might be formed at the lower point where the head would rest on the pubic bone.

Let us now consider briefly the more unusual features of the case. First. Could the dislocation occur from the alleged cause, viz., extreme flexion of the thigh by the accoucheur, and forcible resistance on the part of the patient? It will readily be seen that in this position of the thigh, with the degree of abduction which necessarily follows, the head of the bone is brought into a position in the acetabulum where the cavity is most shallow, and resistance to its escape is at a minimum. It does not seem improbable that during the last stage of parturition the head of the bone may have been so far forced from the socket as to have ruptured the capsule. The nearest approach to this case is that of a person who is reported to have dislocated the femur upon the pubis in the act of "striking out" while swimming. The position and forces in the two cases were not unlike, except that in the case before us there was added the pressure of the accoucheur upon the extremely flexed thigh. It is, I think, proper to assume that this dislocation did occur at the time and in the manner alleged. If this is true, another question arises, viz., Did complete dislocation occur during labor? She alleges that she had only the usual soreness and stiffness which follow labor, and it was not until she attempted to leave the bed that she was seized with severe pain. We may account for these symptoms by supposing that the head was lodged on the pubic bone just without the acetabulum, where it remained without causing any such marked symptoms as to excite attention. When, however, she began to move in the effort to get out of bed, the head of the bone was further displaced upwards and inwards, and by its pressure upon the nerves, gave rise to the severe pains which she afterward suffered. The parallel of this condition is found in the case of the man who dislocated his thigh-bone upon the pubic bone while in the act of swimming. All the inconvenience he suffered at the moment was "a catch in the right groin, which he thought was a cramp," and he was able "to walk after the accident, but with a good deal of difficulty." The position of the head of the bone is such as to lead to the classification of this dislocation among those described as "anomalous." In this form the head of the femur is usually located external to the anterior inferior spinous process, and below the superior process. It may, however, have other positions in that vicinity and still belong to the class of dislocations known as "anomalous," or by some writers as the sixth form of dislocation at the hip-joint. In this case the head is between the two

spinous processes and anterior to them, and in this respect is one of the more rare forms of anomalous dislocation.

ORIGINAL ARTICLES.

A YEAR'S WORK IN OVARIOTOMY.

BY WILLIAM GOODELL, M.D.,

PROFESSOR OF CLINICAL GYNECOLOGY IN THE UNIVERSITY OF PENNSYLVANIA.

DURING the past year I have performed, as the subjoined table will show, twenty-five cases of completed ovariectomy, with seven deaths. Besides these, I had one, a patient of Dr. E. W. Watson, in which the operation was not completed. The cyst was fastened to every structure it touched, and, after the upper adhesions were severed, it was found to spring from a cancerous mass involving all of the pelvic organs. No further effort to remove it being warrantable, a drainage-tube was put in; but the patient died a few days later.

Of the twenty-five cases of completed ovariectomy, four were performed at my private hospital, with one death, which was caused by the bursting of a pelvic abscess into the bladder. Eleven were operated on in the Hospital of the University of Pennsylvania—which is a public hospital—with only one death, and that one from hospitalism. Ten were operated on at their own homes, with five deaths. Of these five fatal cases, I did not again see but one of them after the operation, and she died in eight hours, from the shock of the removal of an intraligamentous and purulent cyst.

I am always sorry not to have the subsequent management of my ovariectomy patients, but this is not always possible. Our countrywomen are very averse, not only to being operated on, but also to being operated on away from home. Hence their unwillingness to go to hospitals, and their proneness to delay matters until they have become too weak to travel. Again, three of the seven fatal cases were at the time of the operation very ill from septic fever caused by purulent cysts. In two, the cyst-walls had broken down from previousappings, and this is another grave fault of our women, who insist on being tapped, and who put off the operation until the cyst has become very large, or has contracted adhesions. Thus, out of the twenty-five cases, there were only eight without adhesions. While my statistics do not make as good a showing as those of British ovariectomists, there is this to be said in my favor—that I have never refused to operate on a woman however slim her chance of recovery. I make this statement because, according to Sutton,¹ Billroth is the only one among European operators who "refuses to operate upon nothing that deserves the chance of life," and his success amounts to about sixty-five per cent.; whilst a very distinguished and successful British ovariectomist "does not remove very large tumors—those which weigh from sixty to sixty-five pounds, with extensive adhesions, etc."

¹ Transactions American Gynecological Society, vol. viii. p. 84.

Total Number.	Name and Residence of Previous Medical Attendant.	Age.	Condition.	No. of Children.	Previous Tappings.	Place of Operation.	Date of Operation.	Adhesions.	Ovary Diseased.	Size and Nature of Tumor.	Length of Incision.	Drainage.	Result.	REMARKS.
86	Dr. Olive D. Aldrich, Philadelphia.	30	M	1	1	Home.	Jan. 4.	None.	R	15 lbs.	Short.	None.	Recovery.	
87	Dr. Joshua R. Evans, Philadelphia.	30	M			Private Hosp'l.	Jan. 6.	Pelvic, uterine, vesical.	R L	20 "	Long.	"	"	Semi-solid tumor.
88	Dr. J. Lowman, Johnstown, Pa.	46	W	3		Home.	Feb. 18.	None.	R	25 "	Short.	"	"	
89	Dr. James Graham, Philadelphia.	23	M			Univ. Hosp'l.	April 18.	Broad ligament.	L R	10 "	"	"	"	
90	Dr. G. W. Mears, Numidia, Pa.	27	S		14	"	"	Omental.	R	3 "	"	"	"	Solid nodulous tumor; probably malignant. Theappings were for ascitic fluid.
91	Dr. G. T. Fox, Bath, Pa.	32	M	2		Home.	April 22.	"	R	10 "	"	"	"	
92	Dr. Ruel Stewart, Philadelphia.	49	W	1	1	"	April 28.	Omental and br. ligament.	R	20 "	"	"	"	
93	Dr. G. R. Robbins, Hamilton Square, N.J.	51	M	2		Private Hosp'l.	"	"	R L	15 "	"	"	Death.	Died from pelvic abscess bursting into bladder.
94	Dr. A. H. McAdam, Philadelphia.	27	W	1		Univ. Hosp'l.	May 4.	None.	R L	2 "	"	"	Recovery.	Solid tumor of right ovary; cystic of left.
95	Dr. F. C. Sheppard, Philadelphia.	54	W	6		"	May 22.	Omental, vesical, intestinal.	R	40 "	"	"	"	Spindle-celled sarcoma of ovary. Omentum also greatly thickened and hypertrophied.
96	Dr. J. W. Keath, Schaefferstown, Pa.	36	M		3	Home.	June 16.	Universal.	L R	10 "	Long.	"	Death.	Died from excessive vomiting; contents of cyst purulent.
97	Dr. D. B. Hand, Scranton, Pa.	35	M	2		"	June 30.	None.	R L	11 "	Short.	"	"	Died with obscure cerebral symptoms.
98	Dr. J. Wentz, Jeddo, Pa.	30	M	6		Univ. Hosp'l.	July 6.	Pelvic.	L	Dermoid	"	"	Recovery.	Cyst as large as an ostrich egg, full of hair.
99	Dr. I. Z. Coffmann, Phoenixville, Pa.	30	M	5		"	July 14.	Universal.	R	10 lbs.	"	"	"	Cyst contained pus, and had most formidable adhesions.
100	Dr. T. H. West, Keyser, W. Va.	27	S		1	Private Hosp'l.	Sept. 7.	None.	L R	40 "	"	"	"	Convalescence very slow; probably malignant.
101	Dr. Klepstein, Alexandria, Va.	42	M			Univ. Hosp'l.	Sept. 12.	Parietal.	L	35 "	"	Tube.	"	Drainage-tube used on account of oozing.
102	Dr. B. Reed, Atlantic City, N.J.	35	M	1	2	Home.	Sept. 14.	Universal.	R	10 "	Long.	"	Died from shock.	Intraligamentous suppurating cyst.
103	Dr. H. M. Fisher, Philadelphia.	48	M	7	1	Univ. Hosp'l.	Sept. 15.	Parietal, omental.	L	60 "	Short.	None.	Recovery.	
104	Dr. H. St. C. Ash, Philadelphia.	45	W	3		Home.	Oct. 13.	Uterine, pelvic.	R	10 "	"	"	Death.	Died from intestinal obstruction.
105	Dr. C. E. Smith, St. Paul, Minn.	35	M	2		Private Hosp'l.	Nov. 18.	None.	R L	20 "	"	"	Recovery.	Parovarian cyst on right side; ovarian on left.
106	Dr. H. Brubaker, Somerset, Pa.	29	S			Univ. Hosp'l.	Nov. 22.	"	R L	40 "	"	"	"	Parovarian cyst on right side; ovarian on left.

Total Number.	Name and Residence of Previous Medical Attendant.	Age.	Sex.	No. of Children.	Previous Tappings.	Place of Operation.	Date of Operation.	Adhesions.	Ovary Diseased.	Size and Nature of Tumor.	Length of Incision.	Drainage.	Result.	REMARKS.
107	Dr. H. Brubaker, Somerset, Pa.	45	M	8		Univ. Hosp'l.	Nov. 22.	Parietal.	R L	30 lbs.	Short.	None.	Recovery.	Necrosis of cyst from twisting of pedicle.
108	Dr. S. R. Sample, Intercourse, Pa.	45	M	3	2	Home.	Dec. 1.	Universal.	L	60 "	"	Tube.	Died from shock.	Very low from septicaemia. Spray not used.
109	Dr. J. R. Umstad, Lower Providence, Pa.	31	S			"	Dec. 8.	None.	L R	12 "	"	None.	Recovery	
110	Dr. H. W. Elmer, Bridgeton, N. J.	42	S			Univ. Hosp'l.	Dec. 10.	Parietal.	R L	20 "	"	"	Death.	Died on fourth day from septicaemia.

The history of the fatal cases is as follows :

Case 93 was operated on at my private hospital, April 28th, in the presence of her family physician, Dr. G. R. Robbins, of Hamilton Square, N. J. The operation was not a difficult one, although the lower portion of the cyst had to be enucleated from the broad ligament. Everything went on smoothly for several days, then a pelvic abscess formed, and burst into the bladder, ending in the woman's death on the eleventh day. She was a sister to a lady from whom I had successfully removed both ovaries—viz., Case 77 of my series published a year ago in this Journal.

In Case 96 the tumor had existed and caused much suffering for six years. In the last year it gave rise to such desperate and stubborn attacks of vomiting that her physician, Dr. W. J. Keath, of Schaefferstown, Pa., despaired of her recovery. Three times, to save her life, he tapped her, removing on each occasion about twenty pounds of fluid. Until her health had wholly broken down, and she was convinced that nothing else would do, she would not listen to having the radical operation performed. I saw her for the first time on June 16th, the day of the operation, which was performed at her home in Lebanon County. My assistants were Drs. J. R. Bucher, John Bucher, and Reinehl, of Lebanon, and Dr. W. J. Keath, of Schaefferstown, Pa. The contents of the cyst were purulent, and, as far as I could make out, it was a thick-walled intraligamentous cyst of the left ovary, adherent at every point to the abdominal wall, intestines, womb, and pelvic tissues. The corresponding cornu of the womb had to be transfixed and tied for a pedicle. The right cyst was also much enlarged by a cluster of cysts containing a brown plaster-like material, and it was also adherent at every point. I did not see her again, but Dr. Keath wrote me that, directly after she had rallied, vomiting set in, and kept up until the sixth day, when she died.

Case 97, operated on at her home in Scranton, Pa., died on the ninth day from some obscure cerebral lesion. There were delirium and other head-symptoms, but no tympanitis, abdominal tenderness, or other signs of peritonitis. The operation was not a difficult one, but both ovaries were re-

moved, and the woman was fat. I did not see her afterwards, and her physician was also called away on the fourth day, when she appeared to be doing well.

In Case 102 the tumor had been discovered a year before I saw the patient. As it developed, she suffered more and more from abdominal pains, chills, and fever, and became bedridden. After getting no better from a homeopathic treatment of several weeks' duration, she was sent to Atlantic City, where I saw her August 1st. She was bed-fast from severe pain, septic fever, vomiting, night-sweats, and great prostration. Her temperature was high, and her pulse frequent. As she was not in a fit condition for the radical operation, and as she needed closer attention than I was willing to give her during my vacation, Dr. Boardman Reed kindly took charge of her, and on the 3d inst. we aspirated the cyst. The contents, amounting to about five quarts, were purulent, and their removal was followed by temporary relief from some of her symptoms. After two weeks, she was able to sit up for a few minutes, but the sac soon refilled, and the former train of symptoms started afresh. In order to get her into a fit condition for the radical operation, on September 2d I again aspirated. The fluid removed was now wholly pus. She was less relieved by this operation than by the former, and her pulse never fell below 120 beats. On September 14, aided by Drs. B. F. Baer and William L. Taylor, and by my son, I removed the cyst at her own house. As far as I could make out, it was an intraligamentous cyst—viz., one which had developed between the two layers of the broad ligament, but of this I am not sure, as all landmarks were obliterated. At any rate, the cyst was adherent and enveloped everywhere. The bladder lay in front, reaching nearly to the navel, and was so closely incorporated with the cyst-wall as to need very careful dissection. The tumor was then enucleated from its pelvic envelopes, and removed without a pedicle. A number of vessels had to be tied, but she lost very little blood. A drainage-tube was put in. She died from shock eight hours afterwards. On reviewing this case, I think that, in lieu of removing the cyst, it would perhaps have been better simply to have emptied it, and put in two drainage-tubes.

Case 104 was also operated on at home. I did not see the woman after the operation, in which I was assisted by Drs. H. St. Clair Ash, E. L. Duer, and B. F. Baer. There were very firm pelvic and uterine adhesions. By the latter the womb had been greatly lengthened out, and the vagina so stretched that the cervix uteri was effaced. The woman was extremely despondent about herself before and after the operation. On the fourth day, symptoms of intestinal obstruction set in, which could not be overcome, and from which she died on the eighth day.

Case 108 was another forlorn hope, from blood-poisoning before the operation. She was tapped by her physician on October 8th, and again on November 10th. At the latter operation, as the fluid was supposed to be ascitic, and upon its withdrawal a cyst as large as the adult head was found, a hypodermic syringe was plunged into it and fluid enough for a microscopical examination sucked out. The result was an alarming peritonitis which demanded prompt treatment. I saw her at her home for the first and last time on December 1st. She was bedfast, very weak, greatly emaciated, and unable to lie on her back. She had night-sweats and a frequent pulse. The tumor consisted of one large cyst, filled with pus and broken-down flakes of lymph, and a nearly solid portion as large as the adult head. The adhesions were absolutely universal. The bowels lay behind, matted together by thick layers of dirty lymph. Every abdominal organ was plastered over with this lymph, from which protruded many bladders or blisters of serum. Very few ligatures were needed, but a drainage-tube was put in. She died twelve hours later, either from shock, or, as her physician thought, from internal hemorrhage.

In Case 110 both ovaries were removed, and the larger one had many parietal adhesions, needing a few ligatures. The case was a promising one, yet the woman died on the fourth day from peritonitis. I believe that hospitalism was at the bottom of this result, for she was operated on in the Hospital of the University of Pennsylvania, which is a general hospital, receiving many railroad accidents. Further, her room was opposite and very near to the door of the general female ward, where several suppurating wounds were dressed daily. I relied too much on the antiseptic precautions employed, and, perhaps, also on the good record of the ovariectomies which I had performed in the same building during the eleven previous months. These were ten in number, and all of them successful. They were all operated upon in private rooms, at a distance from the wards, but under the same roof, and were kept out of the wards until all danger was passed. In this instance, however, as the distant rooms were occupied, my patient was placed in a room directly opposite to the entrance of the female surgical ward.

Out of the twenty-five cases, there were twelve of double ovariectomy, with four deaths. In all these cases the second ovary was positively diseased. Yet, with a larger experience, I am, under certain conditions, becoming more and more in favor of removing both ovaries. Whenever both ovaries are

diseased, there can be no question about their extirpation; but when only one has undergone cystic or other degeneration, the removal also of the sound one may, under certain circumstances, be good policy. There always is a tendency to the subsequent degeneration of the sound ovary after the diseased one has been removed. More especially is this tendency observed in sterile women, and in those with malignant affections of the ovary. Hence many women whose lives should have been imperilled but once, have undergone the dangers of a second operation. In view of these facts, it seems to me wise to remove the sound ovary in some cases of sterility, in every case of malignant degeneration of one ovary, and in all women who either have passed the climacteric or are approaching it. I should also remove both ovaries in cases complicated with fibroid tumor of the womb. In these convictions I am further strengthened by the disappointment often expressed to me by my patients that both ovaries had not been removed, for they had a morbid dread of the remaining ovary taking on cystic degeneration.

Out of these twenty-five cases, there were only eight without adhesions, and one of these died. In four the adhesions were universal, and three died, two of them from shock. In the one that recovered, oozing from the denuded intestines was stopped by the actual cautery at a black heat. In four the adhesions were very formidable, being either uterine or vesical. Of these, one died. Case 87 had very firm uterine, vesical, and pelvic adhesions. Troublesome oozing came from the surface of the bladder and womb, which, hot water failing, was stopped by Monsel's solution applied by a sponge; the convalescence was uninterrupted. Case 95 was, as shown by microscopic examination, a spindle-celled sarcoma. Firm adhesions to omentum, bladder, and intestines needed many ligatures. The omentum was also greatly thickened and hypertrophied. The woman recovered, and is now well; but I look for an early return of the disease, for, in an analogous case, No. 65 of my published series, in which I operated February 14, 1882, the patient remained well for several months, then a tumor developed, and she died eleven months afterwards. In Cases 90 and 100, the tumors were also probably malignant. The former had been tapped fourteen times for ascitic fluid. The tumor proved to be a small, solid, and nodulous growth of the ovary. It was not examined microscopically, but looked very suspicious; thus far the woman remains well.

In Case 100, the parietal and visceral peritoneum was studded with small, hard nodules, and there was much ascitic fluid. Owing to intestinal obstruction in the third week, the patient had a desperate struggle for life; but, when everything else failed, thanks to ten-drop doses of belladonna administered every two hours, the bowels were finally opened. The patient slowly convalesced, and got very well; but her physician, Dr. T. West, of Keyser, West Virginia, thinks that fluid is again collecting in the abdominal cavity, and that growths are forming at the site of each pedicle.

It is surprising what a large percentage of ovarian

tumors turn out to be malignant. The subsequent history often shows that cysts which present a perfectly innocent appearance to the eye at the time of the operation are in fact malignant. The patient recovers promptly from the operation, but dies a few months later from cancer of the pedicle, of the peritoneum, or of other organs. I have seen this happen several times. In my first case of ovariectomy, one in which the clamp was used, menstrual fluid for several months poured out from the cicatrix, which, in less than a year, became affected with cancer. Sometimes the diagnosis of malignancy can be made beforehand, but unfortunately very rarely.

From the marvellous changes often produced progressively in the epithelial lining of ovarian cysts, by which they are transformed into tufts of villous cancer, Tait inclines to the opinion that their growth is associated with a tendency to malignancy. He believes that tapping hastens this degeneration, and that after an accidental rupture of such a cyst the peritoneum will be studded with patches of papillary cancer. Hence he argues that ovarian cysts should never be tapped, and that they should be removed in the early stages of their existence before these malignant transformations have taken place.¹

THE PREVENTION AND TREATMENT OF PUERPERAL FEVER.²

BY FORDYCE BARKER, M.D., LL.D.

In the paper which we are now to discuss, the author distinctly avows his belief, without any qualification, that "puerperal fever is puerperal septicaemia," and that "it matters not whether it assume the form of metritis, phlebitis, cellulitis, peritonitis, or lymphangitis, the essence of the disorder is a poison, which is absorbed into the blood of the parturient woman through some solution of continuity." Not only the sentence quoted, but the whole tenor of the paper must convey to the unbiased mind that it is the well-defined opinion of the author that metritis, phlebitis, peritonitis, and cellulitis are never seen in the puerperal woman except as the result of an initial lesion, which permits the absorption of a specific poison through the parturient canal, either from the atmosphere—or from direct infection by doctors or nurses from neglect or carelessness—or other agents brought in contact with the sexual organs.

The tendency to this pathological view has been rapidly growing within the past few years, as a result of the enthusiastic interest excited chiefly by the important investigations of our German co-workers, who have so zealously studied the character and effects of the micro-organisms in puerperal women *in hospitals*. In several of the most recent and the most excellent systematic works on obstetrics, I have observed that nothing is said of the

various local phlegmasiae which are liable to arise in puerperal women as a consequence of parturition, and that they are only alluded to in connection with the subject of septicaemia. This seems to me a very grave omission, which must seriously embarrass young obstetricians, who consult these works for information when normal convalescence is interrupted by any of the local inflammations. No one, as yet, has maintained that the process of parturition and the puerperal state exempt a woman from those causes which induce local inflammation in the non-puerperal, or will deny that the process of parturition, and other attendant conditions besides the absorption of septic poison, may be the efficient cause of local inflammation; and I here state my conviction that in private practice, when there is no epidemic influence, twenty cases of local inflammation, due to such causes, will be met with where one will be found due to septic absorption.

It is hardly necessary to say—as I have before expressed the same opinions in a work published some years ago—that I am entirely in accord with the author in his preliminary remarks as to the peculiarities in the system of puerperal women. I suppose that all educated men now know that the blood of a pregnant woman is in a state of hyperinosis, and that, as a rule, "her nervous system is in a plus state of sensitiveness and excitability, and influences which are very controllable in the non-puerperal state produce very evil results here." But it is very evident that in certain points our opinions are wide apart. He regards certain conditions, which always are found following normal labor, and always occur in normal puerperal convalescence, as pathological, but which I believe to be purely physiological.

The ancients believed in the poisonous nature of the menstrual fluid. Pliny described the menstrual fluid as a "fatal poison—which corrupts and decomposes urine, deprives seeds of their fecundity, destroys insects, blasts the garden flowers and grasses, and causes fruits to fall from their branches."

I had supposed this superstition to be extinct, until informed by a letter from my friend, Dr. Weir Mitchell, that he knew "old men who would not permit a woman to enter their wine-room, for fear that, if menstruating, it would injure their wines." He also informed me that "in Roquefort women are not allowed in their cheese cellars." I suppose the theory must be that menstrual bacteria will destroy the bouquet of the Roquefort cheese.

But on the evening of December 6, 1883, in this Academy of Medicine, I first heard the full evolution of this doctrine clearly enunciated. The lochia are described as an offensive fluid, made up of dead and decaying animal tissues, which poisons freshly made, unprotected wounds. I quote textually two paragraphs:

"In every case of child-bearing the endometrium is thus encumbered, and freed by a process of exfoliation and sloughing; in every case the cervix, vaginal mucous membrane, perineum, and vulva, are, in varying degrees, lacerated; and in every case the offensive fluid, called lochia, poisons these freshly made, unprotected wounds."

¹ Diseases of Ovaries, p. 148.

² Read before the New York Academy of Medicine, February 7, 1884, at the adjourned discussion of the paper on this subject by T. Gaillard Thomas, M.D., which was read before the Academy, December 6, 1883. See THE MEDICAL NEWS, December 15, 1883.

Again, the writer says: "Here we have a number of recent wounds constantly and unavoidably bathed with a fluid made up of dead and decaying animal tissue, in a woman whose blood and nerve states are, with reference to septic disease, like flax prepared for the spark, and who is exhausted by pain, anxiety, loss of blood, and deprivation of sleep."

Other quotations might be given, of a similar tenor; and the prophylactic measures which, he asserts, "should be adopted in all midwifery cases, whether they occur in hospital or in private practice," are based mainly on this theory.

Can it be true that the process necessary for the birth of the human race is always attended with the development of a deadly poison whose malignant effects must inevitably prevent the spontaneous and kindly healing of such little traumatisms as always result from the process, and that, therefore, it is the duty of the accoucheur to take preventive measures of the character proposed? Does every parturient woman, in performing the function of maternity, like the scorpion, that carries in its tail an agent for suicide, if death is threatened by fire, physiologically generate an equally fatal poison in a corresponding locality, which the obstetrician must guard against by means that are most inconvenient, alarming, and not altogether free from danger?

I do not intend now to examine the question, which I have before discussed very thoroughly, and my views have long been published, whether there is not a distinct disease, most appropriately denominated puerperal fever, when, if there be any septicaemia, it must be a consequence of a primary disease, and not a cause. Nearly a hundred years ago the eminent obstetrician of London who succeeded Denman, Dr. John Clarke, wrote as follows in regard to puerperal fever: "Unfortunately, the uniformity of the disease was assumed, and each author erected his own experience into a standard, by which to judge of the descriptions and the practice of others." This observation, which I read early in my professional life, made a strong impression on mind. I trust that it will not be deemed egotistical if I say that it had great influence on my mind during the twenty-five years that I was engaged in teaching medical students, as I felt strongly the responsibility of the position, and that I should be culpably negligent in my duty if I simply gave the results of my own observations, or the opinions of a limited number of observers, or the theories of a few popular authorities, but that I was bound to give the sum of the knowledge which had become a part of the common stock of the profession. For reasons which will be obvious, I felt this more strongly in regard to puerperal fever than any other subject which I had to discuss either before medical students or in medical societies. More has been written on this than on any one disease. It has been a terribly fatal disease in lying-in hospitals in all the great cities where such hospitals are found. It has been fatal as an epidemic in rural districts, where, within a certain area, every woman in a sparsely settled population, who gives birth to a

child, for a certain limited period is affected, and a large proportion die. I could refer to very many published reports of such epidemics which have occurred in villages and towns, where for twenty-five or thirty years previous not a single death had occurred in childbirth except from the casualties of labor, such as rupture of the uterus, hemorrhage, and convulsions.

All we know of any disease is derived from the study of its etiology, its clinical phenomena, and its anatomical lesions. The epidemic disease to which I have just referred differs in all characteristic points from what is known as septicaemia. It differs in its origin, its modes of attack, its symptoms, and its anatomical lesions. The symptoms are frequently manifested a day or two before or even during labor, even when the child is subsequently born alive. In septicaemia the symptoms are never observed before or during labor, except when the foetus is putrid. The former disease, puerperal fever, originates from epidemic causes, and from contagion and infection. The latter, from nosocomial malaria, from autogenetic infection, and from direct inoculation. Can a woman after childbirth be exposed to the danger of receiving the poison which produces septicaemia in larger doses than when she has retained in her uterus a portion of putrid, decomposed placenta? Yet I do not believe there is a single person who has had considerable obstetric practice for twenty years who has not had more than once to remove portions of putrid placenta which has been retained for days, and the patient has had no disturbance of such severity that he would call it puerperal fever. In the *Texas Courier-Record of Medicine*, December, 1883, Dr. H. C. Ghent, of Belton, Texas, gives an amusing report of a case to which he was called three days after labor. She was attended during labor by an ignoramus, who appears to have used considerable force, and probably made some efforts to extract the after-birth. The patient, before he left, called his attention to something like a cord protruding from the vagina, which he said would, perhaps, come away by piecemeal. On his visit the next day, he at first said that the protrusion from the vagina was a false conception, but afterwards pronounced it a falling of the womb, which, after a considerable length of time, he succeeded in replacing, and had the anxious husband engaged for twelve hours in constructing an abdominal supporter. On the third day, Dr. Ghent removed a large portion of the placenta and membranes, a putrid mass, with a stench which "was about as much as an ordinary pair of olfactory nerves could well bear." The patient had a quick pulse and high temperature, but the constitutional disturbance was easily allayed, as it seems that a "few thorough washings with hot carbolized water" were all the treatment required.

Before leaving this part of the subject now under discussion, I shall briefly allude to one other point, which strikingly illustrates the difference between puerperal fever and septicaemia. I think there can be no doubt that the majority of the profession believe that all those causes of nosocomial malaria, such as aggregation, bad ventilation, contact with

septic material, etc., which have a tendency to induce septicæmia in surgical cases, have an equal tendency to develop the disease known as puerperal fever in women recently confined. But this does not prove that the diseases are identical, for I think there is abundant evidence that, while these causes are always requisite for the development of surgical septicæmia, puerperal fever may be very epidemic when these causes are wholly wanting.¹

In the early months of 1873, puerperal fever prevailed in the best parts of the city, and in that class of society possessed of abundant means and living under as good sanitary conditions as are possible in any large city, to a degree and extent here unknown for the previous twenty-five years. The deaths from this disease in the hospitals, and in the wards of the city where the poor are aggregated, were much less than in many former years. In five of the best wards of the city, in which are the residences of a great proportion of those of wealth, and few of the class of dwellings known as tenement-houses, with a population of 307,046, there were 80 deaths from puerperal fever, while in the remaining wards of the city, with a population of 605,245, there were but 63 deaths. In other words, I may say that during this period, in those wards of the city where the causes of septicæmia must have existed in the greatest abundance, the mortality was nearly one-third less from puerperal fever, in proportion to the population, than in the best parts of the city, where these causes of septicæmia could have existed only in a very limited degree.

I have good cause to remember this epidemic, as the excessive work, mental strain, and loss of sleep which it brought upon me, as my medical friends know, affected my health to a degree that required nearly six years for perfect recovery. I saw ninety-five cases of this epidemic, of which there were nineteen deaths. Most of the latter I believe to have been fatal in their character from the history which I received, and I only saw them once. I had three cases in my private practice, one of which died. After this, most of the ladies whom I had engaged to attend, by my advice, went out of town for their confinement, and all these had normal convalescence.

From all these considerations, I think that if all the knowledge of this disease be derived from authors who have studied it in hospitals exclusively, it will be limited and one-sided, and the deductions, both as to its pathology and treatment, must in many instances be erroneous and unsafe. Especially must this be the case with those whose well-deserved eminence as operators compels them to be brought in frequent contact with surgical septicæmia, and to witness the terrible results which this produces after the most skilful performance of such operations as laparotomy and ovariectomy. Indeed, one can hardly understand how such a surgeon, who accepts the theory and believes in the necessity of such a prophylaxis and such treatment as are insisted upon in the paper under discussion,

would ever dare to enter the room of a puerperal woman.

There are many other details in this connection which I am tempted to discuss, but these will doubtless receive due attention from the speakers who will follow me. I shall, therefore, content myself by expressing an opinion which will surprise many who have been carried along by the popular wave of the septic theory as the initial cause of most of the puerperal diseases. My conviction is strong, based partly on individual experience, but chiefly on a careful study of the clinical midwifery reports of private practice and all the literature of the subject in my possession—and this is very full as regards the English and French languages—that, outside of hospitals, less than two per cent. of the puerperal diseases, and not half of one per cent. of the deaths after childbirth, are due to septicæmia. There are no statistics of private practice which demonstrate the error of this opinion. The belief of the septicæmists that terrible dangers threaten every woman in childbirth is based wholly on theory. Because the maternal system has certain peculiarities differing from its normal condition—because the lochia is a poisonous fluid—and because there is always a certain amount of traumatic lesion in the parturient canal following parturition, every childbearing woman incurs a most hazardous risk. This is a blunt statement of the argument and its deductions.

I do not care to summon in support of the opinion that I have just expressed any higher authority, even if it were possible to do so, than the writer of the paper which we are now discussing, and from which I make the following quotations:

"And yet what are the usual results? Recovery, uniformly, I might say universally, unless some unusual occurrence manifests itself to prevent this happy consummation. Theorizing about the matter, one would suppose that the mortality resulting from such a state of things must be excessive." . . .

"And yet the facts are these: only about one or two in every one hundred parturient women ordinarily die when properly cared for during labor, even in public hospitals."

Now, if we recall the fact that a large proportion of deaths from childbirth result from the casualties of labor, such as convulsions, rupture of uterus, hemorrhage from placenta prævia, nervous shock, etc., it will be seen that the belief which I have expressed differs but slightly, if any, from his. I certainly find it much more agreeable to refer to our points of agreement than our points of difference.

The limit of time which, in justice to others who follow, I have allowed myself will permit but a very few remarks on "the prophylactic measures which should be adopted in all midwifery cases, whether they occur in hospital or in private practice," as the author of the paper distinctly avows. If "she who is about to bring forth" must "be treated as one about to go through the perils of a capital operation," if all those preparations, so definitely enumerated, which gynecological surgeons insist upon previous to an ovariectomy or a laparotomy, are

¹ See Puerperal Diseases, by Fordyce Barker, M.D., Appendix, page 515.

necessary in ordinary labors; if the danger from childbearing be so great that a wise and prudent obstetrician is justified in subjecting his patient to the hazardous depression of intense anxiety and fearful doubt as to results, and in surrounding her with the vivid apprehension of her family, instead of stimulating and cheering her with the great happiness of maternity and the hope of increased interest and love from her husband; if all or even a considerable part of the details mentioned are necessary "to save thousands of lives which are now lost," and to spare "thousands of desolate households the sorrow of losing their female heads"—then it seems to me evident that the State should make childbearing a penal offence for all those families who do not have a sufficient annual income to make it possible to carry out all these requirements. Such a law could only be made effective by adopting the facetious suggestion which appeared in the *Medical Record* of January 19th, over the signature of Seth Hill, Stepney, Conn., making it compulsory for all women unable to carry out these requirements "to wear an antiseptic pad over the vulva from the inception of the catamenia until the menopause, to be non-removable without strict antiseptic precautions under the carbolic spray;" and, to secure this pad, it would be necessary that some State official should apply the lock, which, no doubt, many present have seen in the Museum de l'Hotel de Cluny, said to have been used by the noblemen of France to prevent their wives from falling during their absence in the Crusades.

The description given of puerperal fever, true as it may be, in its outlines, of the septicæmia which gynecological surgeons are so often forced to encounter, I think, will strike obstetricians familiar with the disease in the lying-in chamber as the ideal picture of a poet, differing as much from the scientific description of trained clinical observation as the pictures of natural scenery by a Byron or a George Sand would differ from a scientific description of a mountain or a lake by Humboldt.

As to diagnosis, I cannot regard the symptoms mentioned, even in their totality, as pathognomonic of septicæmia, as all of them are to be found in other puerperal affections, when there is no evidence of septic absorption, unless with the author it be assumed that all puerperal disturbances are due to this cause alone. It is made an important point by the author to determine whether "the septic disease which is developing has originated in wounds situated between the os internum uteri and the vulva, or in the endometrium, above the former point." He says that "usually the question has to be decided by the efficacy or inefficacy of frequent germicide vaginal injections in bringing down the temperature and controlling other grave symptoms."

Now, I look at this subject from an entirely different point of view, and, as I have not the time to examine in detail the treatment inculcated in the paper we are now discussing, I must be content with the expression of my convictions by a few general propositions.

In puerperal fever, as met in private practice, we have to treat the consequences of some form of blood-

poisoning. This may or may not be septic poisoning. In private practice, I think it generally due to some occult, possibly atmospheric, epidemic influence; in hospital patients, nosocomial malaria, often associated with septic poisoning.

No treatment which interrupts the normal physiological processes—such as the retrograde metamorphosis of involution, the fatty transformation of the component fibres of the uterus, or the cicatrization of its internal surface by the exudation of organizable lymph, and the development of a new layer of mucous membrane, or the healing of traumatic lesions—can be justified, unless positive symptoms, now well understood in science, demonstrate their necessity.

Antiseptic injections, both vaginal and intrauterine, are of great service when the indications for their use are clearly shown by local signs or general symptoms, but they cannot be recommended with safety as a routine practice on theoretical grounds, as, for obvious reasons, they may be most detrimental in retarding the cicatrization of lesions and the other processes of normal convalescence, and are otherwise sometimes dangerous. In several cases which I have seen with others, where antiseptic injections, both vaginal and intrauterine, had been used with all the care and precautions inculcated by the author and kept up for several days, the temperature rapidly fell, the profuse and sometimes offensive vaginal discharges speedily diminished, the pulse and general condition manifestly improved after the injections were discontinued.

I shall only add a few words in regard to refrigeration as a means of reducing fever in puerperal diseases. I have no question that it may be useful in some cases, but my own experience in this method of treatment has not been favorable. Many years ago I tried it in several cases in Bellevue Hospital, but I soon gave it up, as the results were less satisfactory than where other plans of treatment were pursued, and I know that this was the conviction of my house-staff. Cold will effectively and usefully reduce the temperature in active inflammations and acute fevers, but in adynamic diseases and in hectic fever this must be attended with a rapid waste of tissue more dangerous than the pyrexia. In three cases which I have seen with others—two a year ago and one this winter—where the coil had been assiduously kept over the abdomen, most of the time two or three days, the conditions in each were remarkably similar. The abdomen was blanched, colorless, and not sensitive to pressure; the patients all avowed that the coil gave them great comfort, but the temperature was very high in all—in one 104.3°, and in the other two over 105°; the pulse was very rapid and feeble, the heart's action extremely weak, with pulmonary symptoms—such as short, rapid, and shallow respiration—which caused grave apprehension that there might be latent centric pneumonia. After some discussion, I induced my friends to remove the refrigerating coil, and, in its place, to cover the abdomen with flannel saturated with the oil of turpentine, for the purpose of stimulating vaso-motor action, restoring the capil-

lary and equalizing the general circulation. All were taking quinine in large doses. This was greatly diminished or wholly stopped, and digitalis and ammonia in full dose were substituted. In a few hours the change in each of these cases was most remarkable; the temperature was reduced from two to three degrees, the pulse was greatly lessened in frequency and increased in force, and all pulmonary symptoms, which had caused so much anxiety, had disappeared. Two of these cases recovered and are still living. The third, who had also been treated by antiseptic vaginal and uterine injections, was apparently convalescent, when suddenly she became much worse; collapse supervened, which was found to be due to a sudden development of diphtheritic membranes, which covered the mucous surface of the vulva and vagina, the result of carelessness and dirtiness of the nurse. The patient died in a few hours.

I now ask permission to refer to a matter outside of the question of the prevention and treatment of puerperal fever, but in behalf of the "truth of history." I ask any who may feel sufficient interest, to turn to page 320 of my work on the *Puerperal Diseases*, where they will find on that and the following pages the subject of intrauterine injections fully discussed. Instruments for this use, which had been devised more than fifteen years ago, were shown to the class, and explicit directions were given as to the methods and indications for these injections, differing in no essentials from those we heard in this hall on the 6th of December. The lecture was delivered in the amphitheatre of Bellevue Hospital, in February, 1869, and the work in which it was printed was published in January, 1874. Then it may interest some to look at page 85 of Volume IV. of the *Transactions of the American Gynecological Society*, and read the papers by Dr. Edward W. Jenks, of Chicago, and Dr. James R. Chadwick, of Boston, on intrauterine injections, and the discussion which followed.

In conclusion, I shall only add that my creed today is fully avowed on page 476 of the book to which I have before referred, and, unless in the future I learn new facts and new arguments to change my faith, I shall "die impenitent."

A CASE OF MISTAKEN SEX.

BY WM. P. MCGUIRE, M.D.,
OF WINCHESTER, VIRGINIA.

A. B., thirty-five years of age and in good circumstances in life, consulted me on January 12, 1884, in order to have the sex to which she belonged determined. She was to all outside appearances a fairly formed woman about five feet four inches in height, with long hair curling down her back. Her voice and features were effeminate, and her demeanor was modest. From birth her dress had been that of a woman. All of her associations had been with women, and her business in life that usually followed by that sex. There was no hair upon her face.

I found upon examination that the conformation

of her thorax was similar to that of a woman, and that her breasts were developed similarly to those of a young girl. The nipple was erectile. Her arms, hands, and lower limbs were like those of a man. There was a small penis in the natural position about three-quarters of an inch in length, with a well-formed glans and prepuce. It was capable of erection, but had in the glans no aperture. Following from the base of the penis backwards was a sulcus about one-half an inch in depth and two and a half inches in length. Lying upon each side of this sulcus, and each enclosed in separate scrotums, were two well-formed and developed testicles, each attached to a moderate sized spermatic cord, the whole conformation resembling the vulva of the female. There was no opening in this sulcus, but just at its posterior termination was an opening one-quarter of an inch in diameter, which was the external opening of the urethra, extending backwards and upwards into the bladder. No prostate gland was found. She stated that all of her proclivities and desires had been masculine, and admitted that occasionally in her sleep she had pleasurable sensations followed by an ejaculation of a white fluid from the opening of the urethra, which was, of course, an ejaculation of semen. There was no trouble in determining her sex. She was advised to change her dress to that of a man, and to attempt to have by a plastic operation a new urethra made from its termination in the perineum, along the sulcus to the glans penis, in order to effect more convenient urination, as she is now obliged to do so in the sitting posture.

ABSCESS OF THE TONSIL IN AN OCTOGENARIAN.

BY SOLOMON SOLIS-COHEN, A.M., M.D.,
DEMONSTRATOR OF PATHOLOGY AND MICROSCOPY IN THE PHILADELPHIA POLYCLINIC.

OF one thousand consecutive cases of acute tonsillitis observed by Morell Mackenzie¹ at the London Hospital for Diseases of the Throat, but nine occurred in patients over fifty years of age, and in no instance was the patient older than sixty.

The following case is, therefore, worthy of record if only as a rarity; but by that very rarity it acquires a special diagnostic importance.

June 7, 1883, Mrs. V., aged eighty, was brought by her grandson to the office of Dr. J. Solis-Cohen, in whose absence the patient was examined by me. The lady was of sound faculties, and her bodily vigor was fairly well preserved. She had long suffered with dyspepsia and with chronic bronchitis, for which she occasionally consulted a practitioner of a "pathy," and four weeks previous to the time I saw her, this gentleman had been summoned to treat her for what he called "diphtheria." Two weeks later a quantity of blood and pus escaped from her mouth, and from that time the discharge had continued more or less copiously. There was occasional hacking cough, and degluti-

¹ Diseases of the Throat and Nose, vol. i. p. 49, London, 1880.

tion was painful. Her grandson became alarmed, and insisted that a physician should be consulted. He stated that he had looked into her throat, and had observed what he supposed to be a large tumor springing from her right tonsil. Inspection of the throat showed considerable tumefaction of the anterior palatine fold of the right side and enlargement of the corresponding tonsil, these structures being of a dark red, almost livid, hue. The middle portion of the tonsil was occupied by an irregular excavation of considerable depth, having ragged edges, and surmounted by a projection, irregularly spheroidal in shape, about the size of a filbert-kernel, and somewhat lighter in color than the surrounding tissues. The bed of the excavation was fungated, but there was no discharge nor covering of pus. From the history I concluded that the case had been one of acute tonsillitis, proceeding to suppuration; as a consequence of which the tonsil was left in the condition described. An application of the compound solution of iodine was made to the parts, and the patient was directed to return next day for the purpose of further examination by the gentleman whom it had been intended to consult. On this examination the diagnosis was confirmed, and the local treatment continued. In addition, there was ordered for internal administration, the solution of potassium arsenite, three minims to be taken in a teaspoonful of compound tincture of gentian, thrice daily, after meals. The patient was permitted to take her customary summering at the seashore, reporting for supervision at the end of a week, and again after a fortnight; one reason for thus keeping the case under observation being the diagnostic importance of positive exclusion of epithelioma,¹ which latter might justly have been suspected from the age of the patient, the appearance of the parts, and the unilateral manifestation. The sex of the patient did not favor this view; but the absence of cachexia and of glandular enlargements need not have militated against it, presuming the tonsil to be the seat of a primary epithelioma. It is true that this condition is rare, but tonsillitis in one so advanced in years is a still more unusual occurrence.

On July 16th the patient was finally discharged, the parts having remained for two weeks in a normal condition. During November, I was informed that this healthy condition had been continuous.

MEDICAL PROGRESS.

PHOSPHATE OF CODEIA.—DR. FRONMUELLER employs the phosphate of codeia for hypodermatic injection. He says (*Memorabilien*, July 16, 1883) that it possesses the advantage over the muriate and sulphate of being much more soluble. The substance crystallizes in slender, four-sided columns, is white in color and of a bitterish taste, and is soluble in four parts of water. Its action is very like that of morphia, but it is milder, and the symptoms of poisoning (such as great weakness, intense headache, bilious vomiting, etc.) are much less often encountered.

¹ This possibility dictated the arsenic treatment.

tered. It seldom causes local irritation when subcutaneously injected. The dose should be at least double that of morphia. The phosphate of codeia is especially recommended in the case of women and children.—*Practitioner*, January, 1884.

VAGINAL EXTIRPATION OF THE UTERUS.—BREISKY reports a case of total extirpation of the uterus by the vaginal method, on account of carcinoma, in a woman, æt. 60 years. The patient recovered, though it remains to be seen whether the malignant growth will recur.—*Centralbl. für Gynäk.*, January 5, 1884.

PARASITE IN THE ONION.—M. JOANNES CHATIN has recently discovered a helminth in the common onion (*Allium cepa*), which has given rise to a disease. Pasteur has carefully studied the parasite, and found it similar to the parasite of mildew in wheat, but with less vitality. The best means for destroying it is to pull up the affected plants and burn them.—*Revue Scientifique*, January 5, 1884.

REACTIONS OF STARCHY MATTERS.—At the meeting of the Société de Biologie, on December 8, 1883, M. DASTRE reported the results of his experiments on the reactions of starchy matters (starch, glycogen, and dextrine). The procedure which he proposes is founded on the fact that chloroform has the property of removing iodine from water. If we attempt to decolorize a solution of iodide of starch, we fail; we succeed, however, with pure glycogen; iodide of glycogen (an expression which Dastre employs for convenience of language) has a much weaker retaining power for iodine than has iodide of starch, and it is decolorized by chloroform.—*Gazette Hebdom.*, December 14, 1883.

PORRO OPERATION.—H. FEHLING reports his fourth Porro operation, which was successful both for mother and child. The patient was thirty-three years old, and the operation was performed on account of osteomalacia.—*Centralbl. f. Gynäk.*, January 12, 1884.

TREATMENT OF ANEURISMS OF THE AORTA.—In his inaugural dissertation, DR. LACONTRE gives the results of his observations on this subject, and draws the following conclusion:

Iodide of potassium is a sure means of calming the cough, dyspnoea, dysphagia, and the symptoms of compression due to aneurism of the aorta. It often produces a regression and atrophy of the aneurismal tumor, and seems also to give a greater prolongation of life than any other treatment. In a majority of cases it is well borne by the patients, and is quite innocuous.—*Revue de Thérap.*, January 15, 1884.

HYPODERMATIC INJECTIONS.—M. LUTON divides hypodermatic injections into two great classes, according as it is necessary to make them in an alkaline or an acid medium. The alkaline medium—that existing in the subcutaneous cellular tissue—is the proper place for injecting neutral salts; the acid medium found in the muscular tissue is very favorable for the absorption of acid, alkaloidal, and certain metallic salts. The salts of mercury, for example, are absorbed with difficulty by the subcutaneous cellular tissue, and are liable to cause local inflammation; but when injected into the muscular

tissue the absorption is complete, and local accidents rarely occur.—*Revue Scientifique*, January 3, 1884.

NITRITE OF AMYL IN PNEUMONIA.—PROF. SILVESTRI, of Parma, formulates his conclusions as to the value of nitrite of amyl in pneumonia as follows:

1. In the preorganic stage of pneumonia, the nitrite of amyl may be of prompt and effective service.
2. One may repeat with impunity the inhalation of this remedy during several successive days, and in doses relatively enormous. (He has administered as much as fifty grammes of the nitrite in five days, the inhalation being carried on for five minutes every half hour.)
3. In cases which have a fatal issue, whether from extension of the pneumonia, or from complications, these inhalations may retard death.

In the brief note of his experience with the nitrite four cases are recorded. In the case of a man, fifty-nine years of age, suffering from double pneumonia, which had reached its fifteenth day, the nitrite was commenced under the following conditions: Pulse very small, 120; respirations superficial, 44; temperature, 101.5°; stupor, cyanosis of the face and extremities, coldness of the point of the nose, and tracheal râle indicating the approach of a fatal termination. At the end of five minutes, during which twenty drops of the nitrite of amyl were administered, the stupor appeared less, but the other phenomena persisted. The inhalations were repeated during the night, about ten grammes being thus given. In the morning pulse 120, respiration 64, temperature 101.3°, with less cyanosis, and signs of commencing resolution. With progressive improvement two days later the pulse was 96, respiration 36, and temperature 100°, and in a few days the patient was convalescent.—*Glasgow Med. Journ.*, January, 1884.

ULCEROUS TYPHOID SORE THROAT.—DR. E. RAPIN, in a communication on this subject to the Société Médicale of Geneva, draws the following conclusions:

1. Typhoid fever affects the throat more often than is generally supposed; in fact, the first symptom may be a sore throat of an ulcerous nature.

2. The ulcerations are superficial, rounded, or, more usually, oval, with a slightly elevated border, hard floor, ordinarily indolent, and generally situated on the anterior pillars of the fauces, and on their anterior face.

3. Their diagnosis is sometimes very difficult; it is only by frequent examination and attention to the general symptoms that they can be certainly recognized. These ulcers seem specially to affect the lymphatic system; the lesions of the lymphatic apparatus are identical with those found elsewhere in the course of typhoid fever.

4. Their development is due to the direct penetration of the typhoid germs into the follicles of the faucial region.—*Revue de Thérap.*, January 15, 1884.

ARSENIC AS AN ANTIPYRETIC AND PARASITICIDE IN RELAPSING FEVER.—BOGOLOMOW reports four cases of relapsing fever treated with Fowler's solution. The first was that of a man, æt. 36. Treatment was commenced on February 14, 1883. The morning temperature was 103° Fah., evening temperature 105°. The spleen and liver were enlarged; there were petechiæ under the skin, and numerous spirochætae were found. On Feb.

15, the morning temperature was 103°, evening temperature 104°. Gtt. iv of Fowler's solution were injected under the skin; five hours afterwards, the temperature sank to 92.5°, and the pulse from 100 to 60. On the following day, the temperature was still 92.5°, and no micro-organisms could be found.

On the twelfth day after the beginning of the attack, the temperature rose suddenly to 104.8°, and large numbers of the micro-organisms were found in the blood. The solution was again injected, and with the same result as before. The effect on two of the other three patients was equally good. The temperature and pulse rates were promptly reduced, and the micro-organisms disappeared from the blood.—*Centralbl. für klin. Med.*, December 29, 1883.

MODIFICATIONS IN MUSCULAR STRUCTURE AFTER NERVE-SECTION.—M. BABINSKY has recently presented a communication on this subject to the Académie des Sciences. These modifications consist essentially of simple atrophy of the contractile substance with multiplication of the sarcolemma cells. Babinsky shows that atrophy of the contractile substance progresses in direct proportion to the development of the protoplasmic structure; this dissociates the primitive cylinders, and thus brings out the field of Cohnheim much more distinctly than in the normal state; it accumulates in certain fasciæ, at their periphery and between the sarcolemma and the striated substance, in other fasciæ at their central part, so that the striated substance is turned back toward the sarcolemma. This last disposition is particularly interesting, because the altered muscular fibres are exactly similar to muscular fibres in process of development.—*Revue Scientifique*, January 12, 1884.

ANTAGONISM OF PILOCARPINE AND ERGOTINE.—M. RABUTEAU reported at a late meeting of the Société de Biologie that there is an antagonism between pilocarpine and ergotine, the first substance acting as a vasodilator poison, the second as an excitant of the unstriated muscular fibres.—*Gazette Hebdom.*, December 14, 1883.

PILOCARPINE IN SCARLET FEVER.—MR. FRANK SHEARER reports a severe case of scarlet fever, with convulsions, treated successfully by subcutaneous injection of pilocarpine, gr. $\frac{1}{8}$. Soon the skin became moist, and in from ten to fifteen minutes the patient was salivating, and was bathed in a profuse perspiration, great beads of sweat standing on the face, and, in the course of fifteen minutes after the injection, and an hour and twenty-five minutes from their first appearance, the fits ceased and never recurred. Therapeutically considered, it is very interesting to find that when venesection to a very fair amount had failed, the pilocarpine first showed its marked physiological effects, and then stopped the fits, and that after such a lapse of time as quite to put it beyond all reasonable doubt that the venesection had very little to do with the successful result. Indirectly, perhaps, it aided it, as did also the application of the hot pack, which was kept up very industriously; yet both of these methods of treatment were in operation for upwards of one hour and a half without in the least modifying the fits.—*Glasgow Med. Journ.*, January, 1884.

THE MEDICAL NEWS.

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SATURDAY, FEBRUARY 16, 1884.

THE DISCUSSION UPON PUERPERAL SEPTICÆMIA.

Our present number has the conclusion of the discussion at the New York Academy of Medicine of Dr. Thomas's paper upon "The Prevention and Treatment of Puerperal Septicæmia."

Dr. Thomas, believing in a specific poison as the cause of so-called puerperal fever, proposed ten rules which he stated ought to be carried out in every case of confinement, for the purpose of preventing the disease. Some of them are wise and practicable, but others seem to us utterly useless. For example, what is the necessity of giving every four hours antiseptic vaginal injections to a woman in labor when there is as yet no traumatic surface—vulval, vaginal, cervico-uterine, or intra-uterine; and when there is ordinarily such abundant secretion from the birth-canal that absorption is in the highest degree improbable, if not impossible? Again, the suppository of iodoform (three to five grains, with cocoa butter) which, after labor, is to be passed up under the os uteri every two or three hours, may open the vulvo-vaginal door for the entrance of more disease-germs from the atmosphere than the iodoform can kill. Every eight hours the patient has a warm antiseptic vaginal injection. Finally, an antiseptic catheter is to be antiseptically used, if the instrument be necessary—and the necessity will be apt to come to a patient who has such luxury of attentions as are directed. Whence it will be seen that the patient's genital organs are more or less disturbed fourteen to eighteen times in the twenty-four hours. We must believe that physical and mental rest has as much to do in

helping puerperal convalescence as microbes have in causing puerperal disease.

In reading Dr. Thomas's elaborate directions, the passage in *Rasselas* comes to mind, "Thou hast convinced me it is impossible to be a poet;" and, similarly, each woman to whom these ten commandments are read and expounded, would be apt to think, if not to say, "Thou hast convinced me it is impossible to have a baby and live." We do not believe one physician in a hundred will endeavor to secure the observance of all these rules; the prophylaxis of puerperal septicæmia—and this prophylaxis is of great importance—ought to be simpler, less complicated, less perturbing and disturbing Nature's processes. Intensely earnest, thoroughly honest, and gifted with rare oratorical power, as Dr. Thomas is, we do not wonder that so many of the Fellows of the Academy heartily indorsed his utterances, but only that any one dared to controvert them.

Dr. Thomas, in his brief reference to the outbreak of puerperal septicæmia, speaks of the disease beginning with a chill. Now, this statement may mislead some who have never seen the disease, and therefore we beg leave to remind them that in some cases a fatal lymphangitis, metritis, or peritonitis, or a general septic poisoning, without distinct localization, at least discovered during life, may occur, and Nature give no cry of alarm by a chill preceding the symptomatic fever.

In the treatment of the affection, Dr. Thomas advises hypodermatic morphia, antiseptic intra-uterine injection, reduction of temperature by the use of ice-water in Townsend's coil and by quinine, or by Warburg's tincture (a preparation which will generally be found disagreeable to patients, and which, considering the multiplicity of its ingredients, is hardly worthy of scientific recognition), and support by milk and animal broth. Probably the antiseptic intra-uterine injections are the most important part of this treatment. Dr. Thomas has not said a word too much in their favor, but it is to be remembered that Dr. Barker has also warmly advocated them, as may be seen by consulting his very valuable work on *Puerperal Diseases*, and the fourth volume of the *Transactions of the American Gynecological Society*.

The discussion was opened by Dr. Barker, who endeavored to overthrow the septicæmic theory, presented by Dr. Thomas, as well as criticised somewhat the treatment he advocated. Dr. Barker is well known as possibly the ablest of all advocates of the essential nature of puerperal fever; he presents the argument strongly, but chiefly as the result of his own observation, not bringing to bear, or at least only slightly, the large historical resources he has at such ready command, nor fortifying any of his positions by the authority of great teachers: yet

one might find in the writings of the veteran obstetrician of Strassburg, Stoltz, some facts and opinions that are not easily, or at all, reconcilable with some of the positions of Dr. Thomas; similar facts and opinions may also be found in a recent paper by Eustache in the *Archives de Tocologie*. We almost wish these had been presented, so that we might have the answer of Dr. Barker's chief antagonist.

After Dr. Barker's paper had been read, and he had supplemented it by some extemporaneous remarks, several Fellows participated in the discussion, which was afterward closed by Dr. Thomas. In this closing speech the brilliant orator seems to us to have been somewhat discursive; the speech appears even weak in its beginning, but strong and clear in its progress, some passages, indeed, rising to the noblest eloquence, and powerful in its conclusion. A few hard blows were given, but they were given with knightly courtesy and without malice. In the course of this speech the brilliant orator, taking the statement that had been made by Dr. Hanks, to the effect that upward of two hundred and fifty women died every year in New York from puerperal septicæmia, concluded that ten thousand died from this cause every year in the United States, a conclusion which is in a high degree improbable, for the disease is much more frequently seen in large cities, and especially in lying-in hospitals, than in the country.

In the essential positions taken by Dr. Thomas in this speech, he is sustained by leading obstetric authorities; this remark especially applies to his assertion that puerperal septicæmia is dependent upon micro-organisms. Incidentally, we may observe that we wish Dr. Thomas, or some one holding his faith, had quoted in the discussion some of the evidence in favor of antiseptic obstetrics which Dr. Paul Bois has collected in his *Methodes Antiseptiques en Obstetriques*, Paris, 1883. Admitting that a specific poison is the cause of puerperal septicæmia, such obstetrics has a scientific formation; while, on the other hand, the most remarkable results from the use of antiseptics in obstetric practice come to confirm the theory—*cura ostendit morbum*.

This discussion was most able in character, and it will have a wide-reaching and lasting influence. Whether or not all believe with Pajot that the term puerperal fever ought to be consigned to the museum of antiquities, certainly all will be quickened to see that labor and the puerperal state shall be rendered as far as possible aseptic. While we do not accept, as before indicated, all of Dr. Thomas's rules, others are of great importance, and on occasion should be urged upon the profession. And we wish he had supplemented them by an earnest protest against

the interference with physiological labor by digital or manual dilatation—the meddlesome midwifery, which is practised by some, we hope a very small minority of, doctors. It would be much safer for the patients, and their liability to septicæmia would be less, if these practitioners were to keep their hands in their own pockets during the whole course of labor, instead of using them as dilators of the uterine or vaginal orifice.

Proposing at an early day to consider the subject of puerperal septicæmia, we now take leave of the New York discussion.

OGSTON'S OPERATION FOR FLAT-FOOT.

At the meeting of the Medical Society of London, January 14th, PROF. OGSTON, of Aberdeen, read a paper on the mechanism of pes planus, and its treatment by a new operation, which may be found in the *Lancet* for January 26th. The key to the disease is constituted by the relaxation of the ligaments, and the changes in the scaphoid bone and head of the astragalus, which form the inner half of the medio-tarsal or Chopart's articulation. On the under surface of the joint the bones are separated from one another, while the pressure between them is increased on the upper side. Hence, the mutual relations of the articular facets are changed; growth is checked, or absorption takes place, at the upper halves; and there is increased growth of the separated surfaces of the lower halves, which takes place mainly in the astragalus, its head being somewhat square in form and presenting an abnormal ridge or projecting angle, which divides its anterior facet into two portions, of which one articulates with the scaphoid, and the other with the inferior calcaneo-scaphoid ligament. The ridge or angle, in the permanent stage of the deformity, finally projects so much that it locks on the scaphoid, and renders reduction impossible until it is removed. In such cases the head of the astragalus escapes partially from the scaphoid downwards and inwards, so as to form on the inner side of the sole a much larger prominence than that of the scaphoid.

The object of the operation devised by Mr. Ogston is to restore the astragalo-scaphoid joint to its normal position and rigidity, at the expense of producing ankylosis, by denuding the bones of their cartilaginous surfaces, placing the foot in a proper position, and securing its immobility by uniting the two bones with ivory pegs. Bearing in mind that the projecting head of the astragalus lies on the inner side of the sole, about an inch in front of the malleolus, and that the scaphoid is comparatively indistinct, the operation is done, under strict antiseptic precautions, in the following manner:

The foot, grasped by the hand of an assistant, having been placed with its outer side resting on

the table, an incision, commencing an inch from the tibia and carried for an inch and a quarter down to the bones, along the inner side of the sole over the joint, exposes the centre of the latter. The articulation having been freely opened by separating the attachments of the ligamentous capsule to the edge of the scaphoid for half an inch on each side of the wound, the cartilage and thin bony lamina of both the astragalus and scaphoid are removed with a sharp chisel, half an inch broad, through which the cancellous structure of the bones is laid bare. The arch of the foot having then been restored to its normal shape by the assistant depressing the metatarsus, two holes are drilled through the scaphoid into the astragalus, and small ivory pegs driven home, their projecting ends being cut off on a level with the scaphoid by a bone forceps. The lips of the wound are next united with catgut sutures, Lister's dressings applied, and the foot steadied with a few turns of plaster-of-Paris bandage. The patient is kept in bed for two or three months, and is able to walk freely in a week or two afterwards.

Mr. Ogston has performed the operation, thus briefly described, seventeen times on ten patients. In not a single case did the temperature rise above 100° F. The wounds remained aseptic, and the dressings were renewed only a few times. In all great benefit resulted, and in the majority a bony ankylosis and a painless arch were obtained, permitting the subjects to resume their laborious occupations. In one case an ivory peg was spontaneously extruded at the end of five months, but in the remainder it gave rise to no inconvenience. In a few the plantar arch was perfectly restored, while in all it was much improved, and added to the lightness of the patient's step.

With such results before us, we have to congratulate Mr. Ogston upon having brought forward this excellent operation for so troublesome and painful an affection as flat-foot in its confirmed stage. Under strict antiseptic precautions, it will doubtless yield good results in the hands of other surgeons, and we hope to see it fairly tested on this side of the Atlantic.

THE RELATIONS OF TUBERCULAR PHTHISIS TO DISEASES OF THE EAR.

THE coexistence of ear affections, accompanied by purulent discharge, and of tubercular phthisis, has been noted. At times, a discharge from the ear will have been first observed, followed speedily by tuberculosis of the lung; or the tuberculosis is first recognized, and there speedily follows a discharge from the ear, not in the last stages of the consumption, but while the patient is still strong, or, it may be, apparently improving as to the lung

affection. In these cases there is usually observed a minute perforation of the drum of the ear at its lowest portion, which on this account is not easily recognizable. The patient, however, calls the physician's attention to it, because, in the act of sneezing, he hears the hissing sound produced by the air rushing through the opening in the membrane.

PROF. VOLTOLINI has sought to determine the relation of these two conditions, and published a preliminary communication in the *Deutsche med. Wochenschrift*, Jan. 10th. The question, of course, is, have we here a simple catarrh of the ear, an accidental concomitant with tubercular disease, or are they both the result of the same cause—in a word, tubercular? Prof. Voltolini has come to the latter conclusion, and bases his view upon the fact that he has found with absolute certainty Koch's bacillus in the discharge from the ear in two such cases.

OSTEOPLASTIC RESECTION OF THE ANKLE-JOINT.

THE most recent improvement in excision of the ankle-joint, and it is one which appears to have had no followers in this country, is the operation devised by Professor MIKULICZ, of Vienna, and described by him in *Langenbeck's Archiv*, Bd. xxvi. It is particularly adapted to cases in which caries is limited to the ankle-joint and the calcaneum, and affords a far more useful stump than does amputation through the lower part of the leg, or Pirogoff's operation, or Syme's amputation.

As we do not happen to have before us the original article, we copy from the last edition of *Gross's System of Surgery* the mode of performing the operation: "An incision is carried across the sole of the foot down to the bones from just in front of the tuberosity of the scaphoid to a point just behind the tuberosity of the fifth metatarsal bone. From the extremities of this cut, a second incision is extended on each side upwards and backwards to the corresponding malleolus, and united by a transverse incision through the posterior circumference of the leg down to the bones. The foot being flexed, the joint is opened from behind; the astragalus and calcaneum are carefully separated from the soft parts; and the knife is carried through the medio-tarsal articulation. The malleoli and the articular surface of the tibia, along with those of the cuboid and scaphoid bones, are then removed, and brought in apposition." During the subsequent treatment, the foot is kept extended, so that, after the parts are thoroughly united, the patient may walk on the heads of the metatarsal bones, as in talipes equinus.

The results of the operation are recorded by LAUENSTEIN and MIKULICZ in the *Centralblatt für Chirurgie*, No. 1, 1884, and the *Przegląd Lekarski*,

Nos. 36 and 37, 1883. Of Mikulicz's 3 cases, all recovered with good progression, but one died of pulmonary tuberculosis in nine months. Of Lauenstein's 2 cases, 1 recovered with good progression, and 1 died in eight months, of phthisis, which existed at the time of the operation, and was, therefore, an improper one for the procedure. In a sixth case, in the hands of Socin, the patient walked well. In all of the recoveries, the limb was lengthened, as a rule, from three-fifths to four-fifths of an inch, and one and two-fifths of an inch in the case of Socin, but the difference in the length of the limbs was equalized by a high-soled shoe worn on the sound foot.

THE RADICAL CURE OF CONGENITAL HERNIA.

In last week's issue of THE MEDICAL NEWS, we directed attention to the modern operation for the radical cure of hernia. In this connection, it may be interesting to note that in congenital inguinal hernia the modern procedure is attended with peculiar difficulties; not only are the isolation and complete extirpation of the sac rendered almost impossible from the firm adhesions which exist between it and the cord and the testis, but the structures of the cord are spread out like a fan, the sac lying, as it were, in its centre. In these cases the surgeon must content himself with partial excision of the sac, and the question may arise whether, on account of the elongation and isolation of its vessels, whereby the vitality of the testis is endangered, it may not become necessary to sacrifice that organ.

KRASKE, in a paper contributed to the *Centralblatt für Chirurgie*, No. 1, 1883, recommends immediate castration; but this practice is warmly and justly opposed by Sonnenburg and Zeller, in the *Berliner klinische Wochenschrift*, Nos. 48 and 51, 1883, as being unnecessary and calculated to throw discredit upon the procedure. Instead of excising portions of the sac, Hahn has successfully resorted, in six cases, to obliteration of the serous surfaces by a row of catgut sutures.

The statistical results of the modern operation indicate that of eight cases in the hands of Zeller, Maas, Von Wahl, Busch, and Czerny, two were fatal—a mortality which demonstrates that it should not be resorted to unless for weighty reasons.

AN INSTITUTION FOR BIOLOGICAL RESEARCH.

In his Presidential Address before the New York State Medical Society, DR. HUTCHINS calls attention anew to the almost utter neglect in this country of organized facilities for systematic instruction in biology. Harvard and Johns Hopkins are about the only schools offering any real opportunities. In this city, facilities of the kind are entirely want-

ing. None of our medical schools offer any such instruction. At the Academy of Natural Sciences, the rich museum, and the fine library and lectures on geology and mineralogy, are the only means afforded. They are splendid in themselves, but utterly inadequate to satisfy the wants alluded to. Accordingly, Dr. Harrison Allen has suggested in *The American* for January 26th, that a new institution—"The Biological Institute of Philadelphia"—should be established, with a director and an assistant as teachers. The expenses, he proposes, should be met partly by the fees paid by the students and partly from an endowment, which he suggests would be a fitting memorial of our great scientific gathering next September.

We certainly second the suggestion, and as heartily as possible. It is a most urgent need in this great city. We know of many students, men and women, who have been driven to Europe or to Baltimore by just such a lack of opportunity to study at home, to say nothing of the large number who would be drawn hither by such an institution. Its natural affiliation would be with the Academy of Natural Sciences, for, in its library and its museum nearly every possible want in these directions would be filled. Moreover, we have among us just the man for the place of director, a man of the widest reputation, of untiring energy, a tried and trusted teacher—no one could be named who could compete with JOSEPH LEIDY for the place.

GENERAL GRANT'S HEALTH.

THE condition of General Grant's health has, of late, been the subject of numerous newspaper paragraphs, containing gloomy prognostications. It, therefore, affords us pleasure to be able to state authoritatively that General Grant is doing very well, although his recovery from the effects of his fall has been delayed by an intercurrent rheumatism, affecting first the uninjured limb and then flying about to various regions. He walks about the house on crutches, and is waiting only for pleasant weather to go out.

PROFESSIONAL OPINION OF THE NEW CODE.

IN the discussion on the New Code at the late meeting of the New York State Medical Society, Dr. Roosa is reported to have said that "Letters had been received from the best men of many States, urging New York State to stand firm in shaking off the shackles of the so-called National Association, and promising that other Societies would follow the example."

It is greatly to be regretted that Dr. Roosa did not read these letters, so that the profession could have had an opportunity to form its own estimate of

the men who wrote them. However, we hope they will yet see the light of day, and not share the sad fate of those "heartiest endorsements of the course of the *Record* in its advocacy of freedom in consultations," which our New Code contemporary proudly said it too had received "from influential men in every part of the country," but which, notwithstanding our frequent and reiterated requests, it never showed its willingness to produce.

ON looking over the yeas and nays on the vote to restore the National Code, we find that of the prominent New York members present, the following voted in favor of the New Code and against the National Code: Drs. C. R. Agnew, T. A. Emmet, A. Jacobi, A. L. Loomis, D. B. St. John Roosa, and F. P. Foster, of the *New York Medical Journal*, and G. F. Shrady, of the *Medical Record*.

REVIEWS.

DE L'ANUS CONTRE NATURE ILÉO-VAGINAL ET DES FISTULES INTESTINO-UTÉRINES. Par le DR. L. H. PETIT, Sous-Bibliothécaire à la Faculté de Médecine de Paris. 8vo. pp. 223. Paris: H. Lauwereyns, 1883.

ILEO-VAGINAL ARTIFICIAL ANUS AND INTESTINO-UTERINE FISTULÆ. By DR. L. H. PETIT.

WORKS on gynecology and the chapters on the diseases of women in works on surgery make but little mention of these affections. A case of ileo-vaginal anus, seen at the Hospital de la Pitié, in the service of Professor Verneuil, has recently caused M. PETIT to look up the literature of the subject. He has only found a few pages descriptive of the affection in classical works, but has found a large number of cases reported.

These cases, numbering twenty-three, have enabled him to describe accurately the causes, pathological anatomy, the symptoms, diagnosis, and treatment of ileo-vaginal anus. The affection follows strangulation of the intestine in a ruptured vagina, as a result either of an inflammatory or cancerous affection, which causes an opening of the intestine and vagina, and communication between the two.

As the process is the same, whether taking place in the uterus or vagina on the one side, and the intestine on the other, M. Petit has described ileo-vaginal anus and utero-intestinal fistula at the same time; the two affections only differ from the point of view of prognosis and treatment, but the points common to both are very important in practice from a diagnostic point of view, and it is on this account that M. Petit has described them together. With twenty-three reported cases of ileo-vaginal anus and sixteen cases of utero-intestinal fistulæ, he has compiled a monograph to which the Académie de Médecine awarded, in 1881, the Huguier prize—three thousand francs—and which has been recently published in the *Annales de Gynécologie*; and a brief *résumé* of it appeared in THE MEDICAL NEWS for Nov. 17, 1883.

SOCIETY PROCEEDINGS.

THE NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, February 7, 1884.

THE PRESIDENT, FORDYCE BARKER, M.D., LL.D.,
IN THE CHAIR.

THE evening was devoted to an adjourned discussion of the paper by DR. T. GAILLARD THOMAS on

THE PREVENTION AND TREATMENT OF PUERPERAL FEVER,

which was read on the 6th of December.

THE PRESIDENT, DR. FORDYCE BARKER, opened the discussion by the reading of a paper on this subject (see page 182).

He prefaced it with the following remarks:

During the five years which I have had the honor to occupy this Chair I have never before seen a meeting of this Academy so enthralled by the charm of elocution, the fascination of rhetoric, the glow of conviction, and the air of one who speaks by authority—an air which can never carry weight unless it has been before fairly and justly earned by good work—as on the evening of December 6th, when the paper was read on "The Prevention and Treatment of Puerperal Fever."

Its authoritative tone, its earnestness and sincerity, its coloring of being based on experience and observation, instead of being unconsciously deduced from preconceived theory, give the paper such a plausible air of scientific truth as must secure its acceptance without question by many minds whose belief rests on authority, without examination of the data or analysis of argument. The more eminent the author of errors which may dangerously influence medical practice in matters of such vital importance as the saving of life of those who have just become mothers, the more striking the literary excellence and the more admirable the artistic merits of a paper promulgating such errors, the more necessary it is that such errors should be boldly met and promptly refuted. Any paper read before this Academy, by one to whom all concede a place among the most eminent in the department of the profession to which his life has been devoted, if allowed to pass without examination and discussion, will be accepted by great numbers in all parts of the country as a statement of the science and medical practice as enunciated by the most prominent men of the period. It is therefore a duty to examine carefully those novelties in doctrine and in practice which are brought here, and subject them to the test of the advanced science of the day and the accumulated experience of the past.

All will agree that the paper was remarkable for its originality, in that some of its pathological doctrines and the practice inculcated for the prevention and treatment of puerperal fever have never been taught in any work on obstetrics, or by any writer of acknowledged repute. If they are accepted by the common intelligence of the profession, they will assuredly be found in the obstetrical works of the future.

As there are many others who will take part in this discussion, whom all will be anxious to hear, and as the author of the paper is entitled to all the time he

may wish to close the debate, I shall, in the most concise language consistent with clearness of statement, give my reasons for thinking that the whole tone and coloring of the paper are misleading and dangerous, because it is supersaturated with septic infection. I would not "speak disrespectfully" of puerperal septicaemia. I believe it to be one of the most dangerous incidents which may occur to women after childbirth, and I trust it will not be regarded as indelicate if I allude to the fact that in a work on puerperal diseases, published more than ten years ago, a lecture devoted to the consideration of this subject in all its relations fills thirty-seven pages. With the most anxious desire to correct any errors of opinion, and to accept any new views which progressive science or increased and more accurate clinical observation have demonstrated to be true, I have yet found no reason to make any essential change of the views expressed in that lecture.

At the conclusion of the paper Dr. Barker made a few extemporaneous remarks, in which he said that in the early part of his professional career he had used antiseptic vaginal injections. Nearly thirty years ago at Bellevue Hospital he had employed Labarraque's solution for this purpose, keeping up the injections for almost a week after labor. Subsequently carbolic acid was substituted for this, and in his work already referred to he had given the formula which he had always made use of. This practice he had habitually maintained, both in private and public practice, until within the last three years. While attending the meeting of the International Medical Congress in London, in 1881, he was sitting on one occasion next to Thomas Keith, of Edinburgh, and was very much impressed by some remarks which he made on the subject of antiseptics in ovariotomy. They were so suggestive that they caused him to give the matter in its relations to the parturient woman very deep reflection, and he began to ask himself whether many of the interruptions to convalescence which he sometimes met with in his obstetrical practice were not really due to the carbolic acid injections employed. On his return to New York in September, therefore, he reduced one-half the strength of the solution of the acid which he was accustomed to use, and so pleased with the results thus obtained was he, that after a time he gave up using vaginal injections altogether. He felt the less reluctance in doing this from the reflection that even in its strongest form the strength of the solution was not sufficiently great to destroy micro-organisms, if any were present. He also asked himself whether nature did not act wisely in bathing all the parts concerned in the process of parturition with that bland but malignant fluid—the lochial discharge—and, consequently, whether it were not better to leave all the parts at rest, in imitation of the surgeon in the treatment of wounds.

It was now fully two years since his colleague, Dr. A. A. Smith, and himself had ceased using vaginal injections altogether, as a rule. It was now his practice, therefore, in every instance to direct the nurse not to use injections unless expressly ordered to do so, in consequence of some special condition calling for it. The results had been exceedingly satisfactory, and since September, 1882, when the injections were given up, neither he nor Dr. Smith had had a single case in which there had been any interruption to recovery, or in which

it had been necessary to give more than the ordinary attendance, viz., one daily visit for nine days after labor. This might be simply a coincidence; but his experience had been so suggestive that he trusted that others also would try the experiment and make known the results met with.

DR. W. M. CHAMBERLAIN said that he would merely like to make one or two remarks in regard to his tube, to which Dr. Thomas had referred in his paper, and which he stated he had had occasion to modify by making an opening just at the extremity, and by bringing the other openings nearer the latter. One of these modifications (the second) he had already anticipated himself, and he could see no objection to the other. One of the gentlemen who took part in the discussion of Dr. Thomas's paper said that he had found the tube too large; but in all the autopsies of patients who had died from puerperal septicaemia which he had seen, the uterus was found to be large and flaccid; while if the uterus was firm and globose, he was accustomed to look for some other cause of death than septicaemia. It was only in this large and flaccid uterus that the tube was required at all, and hence he believed that it was desirable that the tube should be large. Another reason why he had made the tube as large as three-eighths of an inch in diameter was that it was designed to act as a lever as well, and by lifting up the anterior lip of the os uteri, allow ample room for the escape of all the fluid used in the injections. As to the objection that on account of the vaginal openings all the fluid was liable to escape from the tube before it reached the uterine cavity, he did not think it was valid, because by reason of the smallness of these orifices as compared with the large capacity of the tube, it was impossible that all the fluid should thus escape. In regard to the general subject before the Academy, he hoped that Dr. Garrigues would be heard from, since his recent observations were of great interest, and seemed to be of practical importance.

DR. H. T. HANKS believed that Dr. Thomas's paper would have a vital and lasting influence upon the practice of obstetrics in this country, and that when the rules which he had laid down for the prophylaxis of puerperal fever were generally adopted by the profession, the mortality of childbirth would be materially diminished. This was a disease which was not confined to the cities. During the five years in which he had engaged in rural practice in Massachusetts, he had one case, and this he proceeded to relate. He also mentioned other cases occurring in the country, and then went on to say that he believed that at the present time the profession was ready for any judicious plan which promised better results than those attained in the past. The vital statistics of New York showed that in the year 1883, out of 31,669 women who had been confined, 262 had died; which in the four years, 1880, 1881, 1882, and 1883, the mortality had been 1005. These were startling figures, and it was a reflection worthy of consideration, that many of the victims of puerperal septicaemia would not have contracted it if proper measures had been adopted for its prevention, or, if they had been attacked, might have been cured by appropriate treatment. That the profession in this city was becoming alive to the importance of septicaemia as a concomitant of parturition, however, was shown by the fact, that each year the relative number of cases reported as puerperal septicaemia, as com-

pared with those given under the old designation of puerperal fever, was increasing. During the past fifteen years he had attended about sixty-five cases of midwifery a year. Among these, some of the patients had had puerperal fever, and there had not been a single case of this in which all the trouble could not be satisfactorily explained on the hypothesis of septicæmia.

As a whole, he thought that Dr. Thomas's rules for prophylaxis were admirable, though there were one or two to which he would take exception. The ante-partum injection he thought was unnecessary; the use of the napkin over the vulva being sufficient before labor. The administration of ergot three times a day for a week he believed to be neither necessary nor justifiable, as the drug was harmful except in certain cases where the uterus did not contract well. If laceration of the perineum were found to have occurred, he advised that one deep suture (two at most) should be taken and secured with shot. In no case should the long loops of silver wire be left to become a source of irritation. If the patient, however, were greatly exhausted, or if the laceration extended through the sphincter ani, the primary operation was to be postponed, since even the secondary operation sometimes gave rise to severe fever, and subjected the patient to more or less danger. He fully agreed with Dr. Thomas as to the utility of frequent vaginal injections; but he was not favorably impressed by the use of the iodoform suppository.

In regard to the treatment, he had only one or two suggestions to make. One was that the administration of aromatic spirits of ammonia, in doses of half a teaspoonful, every two hours, would be found of service. In making use of the intrauterine injections, he thought with Dr. Hunter that it was not advisable to move the patient to the edge of the bed, as Dr. Thomas had recommended; and in order to avoid this, he had devised a simple bed-pan of block-tin, constructed in such a way that the patient could lie upon it with perfect comfort, and that the injections could be made with great facility. (This bed-pan was now exhibited by Dr. Hanks.) It was only proper to use intrauterine injections, he believed, when there was a strong probability that the cause of the trouble was within the uterus. The refrigerating coil he thought of service in certain cases. A few of Dr. Thomas's suggestions, however, could be safely dispensed with. In conclusion, he said that there were four assistants upon which he always relied in his management of obstetrical cases, and these were—pure air, absolute quiet, judicious diet, and the use of appropriate antiseptic measures.

DR. WILLIAM T. LUSK remarked that the papers of Dr. Thomas and Dr. Barker, although apparently so antagonistic, in reality seemed to supplement each other in many points, and, therefore, we could hardly spare either of them. To him, personally, puerperal fever was precisely the same as surgical fever. He believed in their absolute identity. There were great difficulties in the way of constructing a good definition of puerperal fever, and no two authors seem to be able to agree in defining it. Puerperal women were peculiarly susceptible to extraneous poisons, and hence when such women contracted diseases, like scarlet fever, for instance, the affection should be regarded as a complication. As regards the relations between puerperal and surgical septicæmia, there were certain dissimilarities in the two

which were due merely to anatomical differences. In the latter there was a clean-cut wound, while in the former we had an œdematous condition of the cervix, enlarged veins, and lymphatics, and other mechanical conditions, which peculiarly favored absorption. Hence, if the same septic matter were brought in contact with a clean-cut wound, and with the genital organs of a woman after parturition, certain differences in the effects produced would be noticed. There was not only the rapidity of absorption, but the nearness of the peritoneum to the uterus, to be taken into consideration in the case of the parturient woman. A great deal of confusion and difference of opinion had grown out of the fact that writers did not keep in mind the marked distinction between putrid intoxication and septicæmia. The distinction between the two, which was thus too often lost sight of, depended simply on the presence or absence of certain micro-organisms in a decomposing fluid. Rod bacteria, it had been demonstrated, were not absorbed in the human subject, and if carried on the hands of the accoucheur to the maternal parts, there was no danger of their communicating sepsis. The putridity of any discharge, therefore, was not the source of septicæmia proper. Putridity, however, was to be regarded as a warning that the round bacteria, which were the real source of danger, were likely to be generated. These were capable of being absorbed, multiplying rapidly, and becoming distributed to the various parts of the organism. They often penetrated to a distance from the lesion by which they entered the system; but if they were of feeble activity they might merely give rise to local inflammations, like cellulitis or peritonitis. But it was not the pathology which he wished to discuss on this occasion; though on account of the fact that the two forms mentioned were so frequently confounded, he had thought it well to allude to them, especially as the treatment most successful in the one was not adapted to the other.

In regard to the prophylaxis, Dr. Lusk said that he thought that we should be careful not to lay too much of a burden upon the practitioner in the way of minute details, which might not, after all, be of much consequence. For instance, he should not expect much benefit from washing the walls and furniture with antiseptic fluid. This opinion was founded upon his experience in hospitals. In the lying-in wards of Bellevue Hospital there had been no pictures on the walls, and no superfluity of furniture, and it had been the practice to wash thoroughly the walls, floors, and such furniture as there was with a five per cent. solution of carbolic acid; but this procedure had never had the slightest effect in preventing the development and spread of puerperal septicæmia. He had his doubts, therefore, whether the observance of this rule would be of benefit in private practice. Afterwards, he had been in the habit of fumigating the hospital wards with sulphurous acid, as was the ordinary practice of the sanitary authorities in houses where cases of infectious disease had been found. In private practice it was certainly the part of prudence to adopt this precaution before attending a case of confinement in any house where there had been a case of diphtheria, scarlet fever, or other similar affection, if it had not already been done. One point which was of considerable practical importance, he thought, was that the patient should not be confined in

a room adjoining a water-closet. The puerperal woman was peculiarly susceptible to sewer-gas poisoning, and he could recall two or three cases of trouble after labor in which the bad odors from the neighboring water-closet seemed to offer the only satisfactory explanation of the illness. When labor was concluded there was not likely to be primary decomposition within the uterus, from the fact that, under ordinary circumstances, no air was admitted to the uterine cavity. In the vagina, however, the conditions were somewhat different. There were heat, moisture, and air, and putridity might possibly result. The practical point in this connection was, that if antiseptic vaginal injections were resorted to when the symptoms first appeared, all trouble would soon vanish. But in cases where the hand or instruments had been introduced into the uterus during labor, those conditions were left which were liable to result in putrid intoxication. Hence the use of intrauterine injections was likely to be of great benefit, and might, perhaps, save the patient's life. If any such procedure was necessary, therefore, it was by all means best to wash out the cavity of the uterus during the labor.

In cases of true septicæmia, where germs (round bacteria) had penetrated into the system, irrigation of the uterus was not of the slightest benefit. It was like attempting to prevent the inoculation of the system with vaccinia, by washing the abraded skin with a sponge after the vaccine virus had once come in contact with the blood. Irrigation was of no use unless there was a "puddle" in the uterus. One injection might, perhaps, do good; but the continuation of them was likely to be injurious. Dr. Lusk then went on to say that when he was in Europe during the past summer, he had visited a number of the principal lying-in institutions there, and when he had inquired whether they now washed out the uterus in puerperal women, the answer was always the same, viz., that if no air had been allowed to enter the uterine cavity during labor, they let the uterus alone. If the hand or instruments had been introduced, on the other hand, they always washed it out. In Vienna it was the practice to use a suppository composed of iodoform and gum tragacanth, and last year the mortality, which for some years previous had amounted to five or six per cent., was reduced to one death in two hundred cases. At Prague the iodoform was not used, but the results lately attained were very remarkable, as out of eleven hundred cases of confinement there had not been a single death from septicæmia. Neither was the intrauterine douche employed there, except under special circumstances, and it was since the indiscriminate use of injections had been abandoned that these good results had been arrived at. These were now reserved for cases in which well-defined indications existed, such as the presence of decaying matters in the uterine cavity. In the main, he agreed with Dr. Thomas as to the use of antiseptics in obstetric practice.

DR. P. F. MUNDÉ said that it had been his fortune to meet with a number of cases of septicæmia, both in hospital and private practice. Of late he had been accustomed to employ local treatment, precisely as in the case of ordinary wounds, and had arrived at the conclusion that this was the proper method of dealing with puerperal septicæmia. He felt that it was his duty to wash out the cavity of the uterus if there was a putrid

discharge, accompanied with pus and other evidences of constitutional disturbance. At the same time, he wished to qualify his opinion in regard to the general subject, since in certain hospital cases which he had met with there seemed to be an entire absence of evidences of inflammatory action, and the presence of something altogether different from ordinary septic infection. These were cases in which he agreed with Dr. Barker that sepsis was not the primal cause of the trouble. This was, indeed, only an opinion; but he was willing to stand by it. But, whatever the etiology, he would take the risk of washing out the uterus whenever he met with fever and offensive lochia.

In regard to the method of making intrauterine injections, he agreed with Drs. Hanks and Lusk, that it was better not to change the position of the patient to the edge of the bed, as Dr. Thomas had advised. As to the use of the Davidson syringe, he objected to that on theoretical grounds, as he did not believe in injecting fluid forcibly into the cavity of the uterus. He had met with one case in which it had produced nearly fatal collapse on the ninth day, and he thought there was very considerable risk of injecting the antiseptic solution into the uterine veins. There are considerable dangers met with in the use of intrauterine injections, which he thought Dr. Thomas had not sufficiently emphasized in his paper. After the lochia became pure, he thought it was advisable to discontinue their use, even if the temperature remained high. It was of no benefit whatever to go on with them, and their continued use might perhaps do harm. Like Dr. Lusk, he thought that after septicæmia had gained a foot-hold in the general system, it was of no service to go on making local injections. In one case that he had met with, the introduction of the tube into the uterine cavity was followed by a slight hemorrhage, which was probably the effect of the end of the tube impinging upon the fundus, and after every subsequent injection a little blood came away. If in any case the lochial discharge ceased altogether, it was the duty of the accoucheur to make a thorough examination, when it would probably be found that the uterus had become ante flexed, and the escape of the discharge thus prevented. In such cases the uterus must be straightened and a tube passed into its cavity, when the temperature would probably at once fall. The Chamberlain tube, he thought the most convenient instrument to use; but in the *Boston Medical and Surgical Journal* and other periodicals, cases had been reported in which air had been forced into the uterine cavity through the lateral openings. As to the choice of an antiseptic, carbolic acid had done well enough up to the present time; but in the light of recent researches, corrosive sublimate would seem to be preferable. The objections to washing out the vagina after normal labor, he believed to be valid, and hence he would advise the same treatment in this part as in the uterine cavity: if there were any septic material present, use the injections; but if not, refrain from doing so.

DR. GAILLARD THOMAS was then requested to close the discussion. He rose and said:

Mr. President and Gentlemen: When quite a young lad I was present at a murder trial which made a deep impression on my mind. When the case had been presented the attorney for the Commonwealth, who was a florid and rather bombastic orator, got up and made a

speech of two hours. At the close all were very anxious to hear the counsel for the prisoner, who had a reputation for great eloquence. Judge of the surprise of the audience when he arose and quietly said: "May it please your Honor, the case is closed; I rest it here. The gentleman on the other side has made so able a speech in favor of my client, that I rely upon it for his acquittal." The prisoner was acquitted. I feel very much in this way with reference to the paper of Dr. Barker, to which I have just listened with feelings which I know you, who are his well-wishers, fully share with me—feelings of surprise, regret, and sorrow. Discussions such as this cannot fail to do good, however, for I am a believer in the old Latin adage, "*Ex collisione scintilla.*" And although, in view of the very grievous errors which, according to my distinguished colleague, I have brought before the profession and suggested for its adoption, I may be preferring silver to gold in deciding in favor of speech instead of silence, I feel called upon to say a few words in simple self-defence—that first law of nature.

Our honored President has been very guarded in opening his attack upon my paper, and has seemed to feel concern lest its author should take offence at his sallies. Let me assure him and you that it would take a great deal more than such a discussion as this to weaken the ties of friendship which a quarter of a century has cemented between us, or to cause me to take exception to the criticism of one whom I have often in times past encountered in the lists of debate, and have ever found just, magnanimous, and courteous.

But, alas, gentlemen, my adversary has to-night incautiously and, I think, unwisely ventured to use against me that dangerous weapon, a two-edged sword, ridicule. Right mercilessly has he given me one edge; let him beware of the other.

As I saw him draw and flourish this weapon a few minutes ago, I experienced mingled feelings of pleasure and of pain. In a scientific discussion, more especially in a debate which directly and immediately concerns the saving of human life, which at this very moment is being deplorably sacrificed in our very midst, ridicule, elsewhere a powerful weapon, is the poorest and most pitiful of arguments. It is the resort of the weak, not of the strong; and as my adversary used it just now, I said to myself, "he feels himself to be very, very weak; he totters upon his pedestal; 'tis pity that he should feel so; for otherwise that master pen, which so often, in times passed, has enchanted us, would not to-night emit what carries pain to my heart and to the heart of every true friend of his in this assembly; of irritability and of spleen, all of which are so little characteristic of his real nature; otherwise I should not be able to recognize, as all others must do, the utter want of logic, the complete absence of argument, the total neglect of appeal to facts, and the very conspicuous presence of signs of wounded *amour propre*, which, like an unwholesome stream, meanders through his essay."

I shall not detain you long. I have little to say, for Dr. Barker's attack calls for no rebuttal, and demands no argument on my part. I said all that I had to say on December 6, when the original firebrand was thrown down, and picked up by the wrong end by my excellent friend. There are, however, one or two points upon which I must touch to avoid misrepresentation.

Dr. Barker declares the pathology which I have advocated to be unsustained by even the most recent researches of those whom we recognize as guides. He appears to object to the fact that I have not stuck closely to the dicta of our text-books, and hugged to my soul the tenets of a by-gone time, as he has done. This is hardly fair. I strove to follow the advice of Billings when he says, "have something to say; say it; stop when you have said it." Had I had no opinions of my own to offer you; had a practice in a large metropolis and in great hospitals taught me nothing during a period of thirty years, I should not have appeared before you. And let my adversary inform himself upon the recent views of pathologists upon this subject, and he will find it is his views which are effete, not mine which are jejune.

I am very sorry that, owing to the weakness of his position, my adversary has felt constrained to exaggerate to the very verge of misrepresentation, and to attempt to display, under the lurid light of ridicule, my statements with regard to the lochial discharge. As far as I can gather anything certain from his discursive paper, the pivotal idea of Dr. Barker's attack seems based upon the belief that I regard the lochial discharge as a poisonous fluid, which by absorption by abrasions in the genital tract gives rise to puerperal septicæmia. I need not tell you that no such absurd idea ever obtained foothold in my brain or enunciation from my tongue. If his idea be this, he has been guilty of very superficial reading of my paper, and should not so easily have concluded that I was affected by idiocy. Look at my essay, which is now in print, and you will see, what you already appreciate must be the fact, that I stated that the lochial discharge was a material ready to take on those alterations which are effected by micro-organisms of bad character, and which, changing its nature, render it poisonous to the abraded tissues. I believe that you will find that the pathology which I have there offered to you, is merely abreast with the views of the advanced pathologists of Germany, France, and Great Britain. As to the pathology of my adversary, Dr. John Thorburn, of Manchester, England, very justly expressed concerning it, I think, the accepted view of the profession, when, in a foot-note to an article upon "*Metria*," which appears in the *British Medical Journal* of August 11, 1883, he says: "It would be inexcusable not to make some reference to the very able papers of Dr. Napier in the *Obstetrical Journal* for 1880, on puerperal fever. He, along with Fordyce Barker, defends the old position of a specific puerperal fever *sui generis*. The time limit imposed by our regulations, allows no opportunity of consulting, step by step, such arguments as he advances. I can only say that his invaluable collection of facts produces in one opinion diametrically opposed to his own."

My critic upbraids me for want of thoroughness, and sketchiness of detail with reference to my description of symptoms. I will merely say, with reference to this, that I intentionally assumed this style, as I was not preparing a lecture for a class of medical students, and my paper was distinctly announced to be one upon "*The Prevention and Treatment of Puerperal Septicæmia*," and upon nothing else. I cannot but thank him for his kindness in comparing my style, in this sketchy description of symptoms, to that of Byron and Humboldt (I

believe these were the authors with whom he compared it), but, alas! as I recall the passages to which he alluded, I am pained to confess that the similarity of style does not strike me as forcibly as it does my partial friend.

Here let me draw the veil of pitying silence over the unfortunate allusion to the squib of Stepney, and the relics of the Hotel de Cluny! We stand to-night upon ground consecrated to science by the dignified fathers of the New York Academy of Medicine, who have now passed away. We stand face to face with the terrible mortality which marks puerperal fever at this very moment.

And now, Gentlemen, a few words as to the prevention and treatment of puerperal fever, which is the only legitimate subject before us for discussion this evening; the only theme which should not at the very commencement of these exercises have been rigidly ruled out, as irrelevant, by our President.

How difficult is it in a large body like this to keep the discussion properly directed to the point at issue! I hope that those who have discussed my paper will pardon me for saying, that we have heard a great deal to-night in way of repetition of what my paper contained as to pathology, a great deal about tubes, and the number of holes which should be made in them, and diverse opinions as to whether or not a suppository of iodoform should be put into the vagina, and small doses of ergot given for a week or so post-partum; but these are non-essentials and hardly worthy of the valuable time which has been given to them, when so much of greater importance remained to be considered. The crucial questions, Fellows of the Academy, which are before you to-night, are these: 1st. Are you to look upon puerperal septicæmia as a poison due to the development of micro-organisms, and are you by every means in your power to guard against the contact of these with the genitals of the puerperal woman? And 2d. When the disorder is developed is it best for you to keep your patient semi-narcotized and quininized, while the distended abdomen is covered with stupes of turpentine or poultices, and await the result, as has formerly been done; or are you to seek to destroy the septic germ which has invaded the genital tract, by local application? These are the great questions; the other points are non-essential ones, and, although important in some respects, sink into insignificance when compared with these.

Take, for example, the first of my suggestions as to the cleansing the lying-in room and applying antiseptic solutions to its walls and floors before labor sets in. This seems to appear to some like one of the labors of Hercules; and a very valued friend of mine, one of the most eminent obstetric professors of this city, seems so firmly to keep his eyes fixed upon it as to allow it to draw his gaze away from others which are of tenfold its value. Now, Gentlemen, what is really the difficulty of doing this thing? In the cottages connected with the Woman's Hospital it is regularly done whenever a new patient comes in for laparotomy, which is on an average once a week; and whenever I operate in private practice, let the operation be as trivial as it may, I always insist upon its performance. A scrubber—and there are many women in New York who make such work a business—takes up the carpet and sends it to the Naph-

tha Cleaning Works, or replaces it by rugs. She then scrubs the floor and furniture with a solution of carbolic acid or the bichloride of mercury. Then, covering a broom with a towel, she stands upon a pair of steps, and, dipping this in a bucket, she wipes off the walls and ceiling. The whole work of cleansing a chamber occupies a few hours. Dr. Lusk has said that he has never seen any good come from scrubbing furniture with an antiseptic solution. Agreed. I have never seen it do any harm, and until I do so, I shall feel that it is safer to resort to it. But, Gentlemen, I am not particularly enthusiastic about this cleansing of the chamber, nor do I regard it as by any means essential. If any gentleman prefers to have his patient confined in a dirty room rather than a clean one, let him do so by all means. I do not gainsay it. If I need any defence for having pressed the claims of cleanliness in this regard, let it be found in the fact that he who offers rules for a system, must aim high, not low; that, aim as high as he may, many will fall below the standard; that if a low level be assumed, no one will go above it and take a higher.

My second suggestion for prevention, has reference to complete change of clothing and the taking of an antiseptic bath by doctor and nurse, before taking charge of a lying-in woman, if they have knowingly been exposed to the effluvia of septicæmia, erysipelas, scarlet fever, typhus, or any similarly contagious affection. Will any one object to this as unnecessary or impracticable? I think not. Yesterday at 4 P.M., I saw in Stamford, a very bad case of puerperal septicæmia; this afternoon at 3, I performed Tait's operation upon a very important case, which could not be delayed. I ventured to do this only under these circumstances: this morning I took a bath of hot water strongly impregnated with salt, and after it shampooed my hair and beard thoroughly with a saturated solution of boracic acid, scrubbed my hands thoroughly, by means of a nail-brush, with a solution of the bichloride one to one thousand, and changed every article of clothing which I had worn at the moment of exposure. The trouble was not great, nor was the process a disagreeable one. It may have done no good whatever, but I feel sure that it did no harm, and it certainly quieted my conscience and gave me a feeling of comfort that I could have obtained in no other way.

My third suggestion was that during labor, a warm antiseptic injection should be administered to the patient by the nurse, about every four hours, and that a towel wrung out of this warm solution should be laid over the vulva. Who objects to this? "If any, speak, for him have I offended." It is very soothing to the patient, and it is difficult to see how she could be injured by it.

My fourth suggestion merely relates to cleanliness of the hands on the part of doctor and nurse. The propriety of this I shall not discuss.

No one will quarrel with my fifth and sixth, which merely require the physician to attend intelligently and faithfully to the performance of the third stage of labor, and the examination for, and closure of, wounds about the vagina and ostium vaginae.

I now come to the seventh suggestion, the use of vaginal injections every eight hours, beginning eight hours after delivery. The arguments which have been brought up against this practice since I read my paper, have had great weight with me. I confess I feel less

firm in my conviction upon this point than I did, and that in future I shall examine the question carefully before I determine to adhere to my plan. You may ask, Why this change of opinion? My answer is that I strive to mend the fault of yesterday with wisdom of to-day.

The rest of my rules will be so certainly agreed in that I cannot question the concurrence of all, even of the eminent gentleman, our President, who regards my efforts as so hurtful to progress and so dangerous to the community to whose medical guides I have made appeal.

A few words now, before closing, upon some of the means which I have suggested as to treatment. With reference to my present views upon the use of cutaneous refrigeration for the controlling of high temperature, however produced, and in the course of whatever disease occurring, I would—after a very extensive experience—say this: Were the laws of my country to prohibit a resort to this method, I would be unwilling to continue the practice of my profession, for I could not do so without relinquishing what I sincerely believe to be one of the most valuable therapeutic resources at the disposal of the physician.

In regard to intrauterine injections, if I have expressed myself in such a way as to allow it to appear that I resort to them with very little provocation and upon all occasions when hyperpyrexia supervenes after childbirth, no impression could be more erroneous. No one could have striven more than I have done to keep within proper bounds, the indiscriminate use of this valuable but dangerous resource. Let me illustrate my feeling with reference to this subject in the following way: I believe that the operation of trachelorrhaphy, as introduced by my friend Dr. Emmet, is one of the greatest advances which a quarter of a century has seen in gynecology. I believe that at the present moment it is doing a great deal of harm on account of its indiscriminate and too frequent performance; many seeming to believe that every woman who bears a child requires a resort to it. Does this militate against the great value of the procedure? Not at all, "*Uti sed non abuti*" might well have been written over its original description, as in olden times it was inscribed upon the case which held the lancet.

My friend, Dr. Barker, must here allow me to offer him a most full and sincere apology for not having accorded to him in my paper the credit which was his due in connection with the introduction of intrauterine injections into obstetric practice. I know that he will freely forgive me when I state that the omission was due to ignorance on my part of the facts which he has stated to-night, and not to any intentional neglect.

Dr. Mundé has expressed the opinion that I have not sufficiently guarded my readers against the dangers of intrauterine injections. As I recall my statements, I cannot but feel that he is in error upon this point, for I certainly strove to the utmost of my capacity so to depict these dangers as to put every man upon his guard concerning them.

I have not been surprised to notice, among other criticisms of the preventive measures which I have suggested, a tendency on the part of some to ignore the necessity for them, especially in private practice. That this would in all probability be done, I suggested in my

paper, and I came here this evening prepared to use some statistics which would invalidate this position. I shall not use those which I brought, however, but employ, in their stead, some which have been offered by the speakers of this evening. Dr. Hanks declares that more than two hundred and fifty women died from puerperal septicæmia in this city last year; that is, two hundred and fifty to a million inhabitants. The United States probably contains, in round numbers, forty million inhabitants, which would give us ten thousand deaths in one year, and in twenty years, which is about the average childbearing time of women, two hundred thousand deaths. Surely, this looks as if something should be done to lessen the mortality of this disease. Does the plan which I have suggested accomplish this result? Let Dr. Lusk answer. He has just told us that in Prague, before a similar plan was adopted—that is, before antiseptic surgery was introduced—they lost five per cent. of hospital puerperal patients by septicæmia; since then eleven hundred women have been delivered without a single death. I hope that I am correct in my quotation of Dr. Lusk; I think that I am.

And now methinks I hear a whisper to this effect: these are the statistics of hospitals; the disease must be rare in private practice, for has not Dr. A. told us that he, out of 500 cases, has had no death; Dr. B. that, out of 1000, he has had none; and Dr. C. that, out of 1500, he has met with only one. Patients are constantly dying from this cause in private practice, nevertheless. It is now just two months since I read my paper, and during that time I have been called to five cases of puerperal septicæmia, four of them, at least, in the higher walks of life, and all four of the most desperate character.

I prefer to state with whom these patients were seen and I feel sure that my colleagues who called upon me will appreciate my motive, and pardon me for doing so. The first case I saw with Dr. Glück; the second with Drs. Hutchison, Crane, and Paine, of Brooklyn; the third with Dr. Lyons, in which suppurative synovitis and abscesses had followed a miscarriage; the fourth I was called to by Dr. Lowenthal, but could not attend; and the fifth I saw yesterday, in Stamford, with Drs. Janeway, of New York, and Phillips and Hurlburt, of the former place. I have ventured to give the names of the practitioners with whom I saw these cases to prove that they occur even under the most favorable circumstances as to social surroundings and medical care.

And now, Gentlemen of the Academy, let me thank you for the kind and courteous attention which you have given me. It is that attention and that courtesy which have emboldened me to detain you so long. I feel very sure that you will give full credence to two statements which I make in bidding you good-night: First. That I have no wish to be dogmatic and uncompromising in reference to the rules which I have suggested for the prevention and treatment of puerperal septicæmia. Second. That if venom has seemed to flow from my tongue it has not reached it from my heart, which has been entirely free from it; and that if I have seemed to strike too trenchant blows at the learned head of our President, I have struck purely in self-defence at one for whom I would yield to no man in respect, admiration, and affectionate regard.

NEW YORK SURGICAL SOCIETY.

Stated Meeting, January 22, 1884.

THE PRESIDENT, R. F. WEIR, M.D., IN THE CHAIR.

HABITUAL DISLOCATION OF THE ULNAR NERVES
—MYOSITIS.

DR. F. LANGE presented a patient, a violinist, who, about a week ago, immediately after more than his usual amount of labor, began to suffer from a severe pain in the muscles of the right forearm, near the elbow-joint, and especially very near the internal condyle. The severe pain lasted only a short time, but the pain did not cease entirely; increased during the next two days, after repeated use of the arm, and on the third day was again so severe that every movement at the elbow-joint was impossible, and the patient suffered intensely. He was under medical treatment for a number of days, and he called to see Dr. Lange last Saturday, when it was noticed that there was some swelling corresponding to the muscles of the forearm, which took their origin from the internal epicondyle, and there was a very tender spot at the end of the ridge through which the ulnar nerve passes. Closer examination determined the existence of luxation of the ulnar nerve between the olecranon and the internal condyle at every attempt to flex the forearm. The nerve could be traced quite distinctly, and rolled freely under the thumb and finger, so that in a semiflexed position it could be dislocated around the protruding point of the epicondyle. The most painful point, however, was where the nerve entered the muscles. In the left arm also the ulnar nerve could be easily moved under the thumb and finger, and the question arose whether the difficulty in the right arm pertained primarily to the nerve or to the muscles. Dr. Lange thought, however, that the case was one of myositis, involving the muscles which have their origin in the region of the internal condyle, and thought perhaps also that the sheath of the nerve had become involved. There were no peripheral alterations pointing to a lesion of the nerve itself.

EXCISION OF THE ELBOW-JOINT.

DR. LANGE also presented a patient in whom he had excised the left elbow-joint nine months ago. She was presented for the purpose of exhibiting an apparatus—described already some years ago—which he had used after this operation with considerable advantage, and which he regarded as useful, especially in those cases in which a great deal of bone has been removed and the new formation is comparatively small, and also where a great deal of abnormal mobility exists. The idea involved in the apparatus is that some slipping of the bones be allowed in such a way that the bones of the forearm are somewhat forced backwards, and an adjustment effected which imitates their physiological apposition. At the same time the joint, by means of rubber strings, is kept in semiflexion. The exercises are done by trying to keep a weight grasped with the fingers, and not allowing it to extend the forearm. In this way the point of support is transferred to the attachment of the rubber strings, a lever action takes place, by which the bones at the forearm are still more brought into coaptation. The weights must be chosen so that they are slightly too heavy, and slowly pull the arm into an extended position. Active extension alone is practised in applying weaker artificial flexors. He thought that

after the apparatus had been worn for a year or more, functional ability of the forearm would be very much improved.

DR. J. C. HUTCHISON inquired whether the motions of the forearm without the apparatus improved any.

DR. LANGE said there was improvement, but it was very slight, and the movements of the forearm were very uncertain without the apparatus, which had been worn for a very short period of time, she not having had any orthopaedic treatment for a number of months.

DR. J. L. LITTLE referred to a case in which he excised the elbow-joint, and the instrument-maker constructed a similar apparatus, which had enabled the patient to use her hand ever since she began to wear it. While wearing the apparatus she was able to accomplish considerable work, but when the apparatus was removed the arm was perfectly useless and hung by her side. The apparatus did not permit of the slipping of the bones, as did that exhibited by Dr. Lange.

DR. H. B. SANDS read a paper on

INTERNAL OESOPHAGOTOMY.

(See THE MEDICAL NEWS for February 9, p. 145.)

DR. POST remarked that Dr. Sands had suggested, as prophylactic treatment, that dilatation be commenced a week after the injury. He would suggest that a week would be rather early, and that two or three weeks would be better, as it is only after the sloughs have separated and the reparative process has become well established that the contraction begins to take place.

DR. SANDS remarked that his patient was about the house and apparently in pretty good health four days after the injury; and he would prefer to give, as a rule, a too early rather than a too late period.

THE PRESIDENT remarked that it had been his good fortune to witness the operation of Bergmann described in the paper, in which the gastric fistule made for the relief of a strictured oesophagus was subsequently closed, after the stricture had been sufficiently dilated. It certainly was a unique and remarkable case.

One point in connection with the paper he thought worthy of remark was the omission of continuous dilatation. He had not had any personal experience with cicatricial strictures as tight as Dr. Sands had cited, but he had had some experience in the treatment of quite narrow malignant strictures. Recently, in one instance, a No. 18 soft catheter was kept in position three weeks prior to the death of the patient, and with great comfort and improvement in the size of the strictured portion, though nourishing the patient was, in the case, the only point aimed at. He was led to adopt this method of treatment by reading an article by Krishaber, who had employed continuous indwelling of the catheter for such lengths of time; and in one instance the instrument remained in position for one year without any detrimental result. The comparison with reference to dilatation was often made between the urethra and the oesophagus, but erroneously; for in the former there is present an irritating or septic urine. Dr. Weir thought it had been shown by Krishaber's cases that the oesophagus bears continuous dilatation better than the urethra does; and the food, being carried inside of the tube, cannot produce irritation. He would therefore, in cases of cicatricial contraction, first try the method of dilatation, before resorting to operative procedures.

REMOVAL OF FOREIGN BODIES.

DR. HALSTED presented several foreign bodies with brief histories of the cases from which they were removed.

Case I.—A piece of fibro-cartilage removed from the œsophagus by external œsophagotomy, at Ward's Island. Hungarian, æt. 33, July 23, 1882, swallowed, at his dinner, a piece of food which became arrested in his œsophagus a little below the cricoid cartilage. The resident physicians were unsuccessful in their attempts to remove it with forceps. They obtained, however, a fragment which, submitted to microscopical examination, proved to be fibro-cartilage. Patient is said to have experienced great difficulty in breathing for several hours, and then to have become quite tolerant of the foreign body, but was unable to swallow even liquids.

July 25.—Foreign body indistinctly definable by palpation of neck, is believed to be lodged in œsophagus just above sternum, projecting more to the right side than to the left. An incision, extending from middle of thyroid cartilage to the interclavicular notch of sternum, is made parallel with the anterior border of the sternocleidomastoid muscle. The oblique jugular vein drawn towards median line. Middle thyroid vein, in upper angle of wound, doubly ligated and divided. Common carotid artery crossed by omohyoid muscle rises up into view.

Foreign body readily mapped out through œsophageal walls, and over it is stretched the recurrent laryngeal nerve. An incision one and a quarter inch is made into the œsophagus, parallel with and posterior to the nerve and the foreign body, measuring one and a half by one inch, removed with a vulsellum forceps.

Wound in œsophagus united by sulphurous acid catgut, and the integument by silk sutures. An iodoformed peat dressing applied. A few days later patient was clandestinely served with blackberries, by missionaries to the island, which interfered with union by first intention, but otherwise did not retard his prompt recovery.

Case II.—Three calculi, each with a portion of a soft catheter as a nucleus, removed from the bladder by lateral lithotomy at one operation.

The patient, a Finn about thirty-five years old, had been in the habit of evacuating his paralyzed bladder with a soft catheter. One day the catheter broke off in his bladder, and a piece, believed to be two or three inches long, was left behind. He subsequently regained the power of his bladder, and applied, six or eight months after the mishap, to Ward's Island for relief of painful and frequent micturition. A stone was detected by Thompson's searcher. On consideration of the history it was believed to be advisable to practise the cutting operation. Patient had such a short perineum that a finger introduced into the bladder could ascertain the number and shape of the stones. These were seized so carefully with the forceps as not to be crushed and removed. The patient's convalescence was somewhat protracted because of a cystitis perpetuated by a few fragments which he eventually passed per urethra. Each calculus contains a piece of the catheter, its point being distinctly demonstrable in one of them.

Case III.—A portion of a bullet removed from the diploë and cranial cavity.

Mr. H. W. G., æt. 52, was admitted to Chambers

Street Hospital, May 9, 1883, for a self-inflicted pistol-shot wound of the head.

Examination. Small circular scalp wound on right side, two and one-half inches below sagittal suture, and one inch in front of external auditory meatus. Normal reflexes and no paralysis—intellect perfectly clear.

Operation. Crucial incision through scalp. External table depressed, and at bottom of depression a hole one-quarter inch in diameter, and about one inch behind bullet wound in soft parts. A probe passed obliquely backwards through the hole detected the foreign body, which was not visible. Thereupon certain fragments of external table were removed, and the bullet revealed lying between the two tables, and projecting somewhat into the cranial cavity—upon its extraction a slightly depressed fragment of the inner table was withdrawn. The wound was dressed antiseptically, and closed with a continuous catgut suture.

Union took place by first intention throughout, except where the incisions crossed one another, viz., at the point of entrance of the bullet, and here there was a very slight necrosis of the approximated corners of the flaps.

The bullet had split upon the outer table of the parietal bone; one fragment entered the diploë and cranial cavity, as described, and the other passed through a mirror, and was found behind the bureau.

DR. HUTCHISON said that some time ago he presented a urinary calculus to the Society, which had for its nucleus a loop of silver wire. The patient had a urethro-vesical fistule which had been closed with silver wire sutures, and he (Dr. H.) was reported to have stated that a house surgeon who had been directed to remove the sutures, overlooked one, which fell into the bladder and formed the nucleus of the stone. This was an error. Dr. Hutchison said that he had himself removed the sutures, and was responsible for having failed to remove the one which entered the bladder.

CORRESPONDENCE.

THE EXTERNAL USE OF THE OLEATE OF ACONITIA.

To the Editor of THE MEDICAL NEWS.

SIR: Allow me to add some supplementary statements and suggestions to my note on the external use of the oleate of aconitia, in reply to numerous communications direct and by letter. The strength of the solution used was 2 per cent. of the alkaloid, so that one minim contained one-fiftieth of a grain. Great care is requisite in securing a pure salt, and the least superheating in combining with the oleic acid destroys its value. My own preparation was made from the imported Duquesnel's "nitrate of aconitia."

Further, I am in possession of no facts which would lead me to suppose that the drug would be of any, even the slightest, value in cases of *peripheral spasm*. Several of my correspondents have spoken of disappointment following its use in cases of *facial spasm* and a number of cases of *spinal accessory spasm*. All reasoning from known facts would lead me to conclude that such a result would only be obtained in an advanced stage of poisoning by the drug. The sensations of pricking,

formication, and numbness, followed immediately by relief, and felt within six seconds after the application, seem to demonstrate that its therapeutic action in the cases referred to is confined to *terminal sensory filaments*. It is a fact, pregnant with suggestions, that in one case in which it was of most signal service, the pains were induced by a large tumor stretching the right brachial plexus, which was enveloped by a mass of hard inflammatory tissue.

I would suggest the further use of the oleate of aconitia as a relief for the burning pains and hyperæsthesia of *neuritis*, and for the distressing pains in those cases of *cancerous growth* involving nerve-trunks, whether in the spinal canal or out of it; in cases of neuromata, single or multiple, especially the multiple subcutaneous form. It also holds out a very fair prospect of relief for those miserable sufferers from *causalgia* (burning pain) in its aggravated forms, symptomatic of *neuritis*, usually traumatic.

Very truly yours,

HOWARD A. KELLY, M.D.

PHILADELPHIA, 323 S. SEVENTEENTH STREET,
January 26, 1884.

SOME RECENT INVESTIGATIONS ON GERMS.

[THE following letter has been received at this office. The author, Herr Riechschwamm, does not belong to our staff of special correspondents, nor is he personally known to us. He signs himself, "First Assistant to Dr. Hahn," but upon reference to the last volume of the *Mittheilungen aus dem Kaiserlichen Gesundheitsamte*, Magdeburg, we do not find his name among the Hilfsarbeiter. These facts, together with the very remarkable results of the investigations he reports, have led us thus to inquire into his trustworthiness. We have felt it incumbent upon us, in publishing his letter, to make this prefatory statement, rather than to withhold information of these latest researches, which are certainly calculated to arrest our attention, even if they do not immediately commend themselves to our unreserved acceptance.—Ed.]

MAGDEBURG, January 31, 1884.

To the Editor of THE MEDICAL NEWS.

SIR: I have thought that some account of the recent discoveries in regard to bacilli might interest readers who are remote from the great radiating centres of constructive science. The latest of these discoveries is even yet spoken of here with caution, but by the time you have printed this, it will have revolutionized one branch of physiology, and produced an evolution of novel ideas, the final results of which not the boldest can predict. But before outlining for your readers a discovery which I am privileged to communicate by permission of Professor Coccisclächter, and before it has been fully published at home, it may be well to describe the *Krankheitenursprungsanstalts*—Museum of Bacilli—collected by the Herr Oberprofessor Keimerzeurger von Verdamtnnarnburg.

This has been done at the cost of more than one life upon the altar of science. The museum is a room about thirty feet square, with double walls of glass, between which circulates water kept at a temperature of 30° C. by three gigantic thermostats, which are so accurate that the heat does not vary the one-fifteenth of a degree. Ranged along the sides, exposed to air or under glasses, are hundreds of half potatoes, on which grow various

bacilli; of late, however, boiled cabbage is said by Keimerzeurger to answer better. Certain specific cocci flourish on the Beta altissima or mangel wurzel, but as to this choice of cultur gartens more is to be said. To walk through this museum with the Herr Professor Keimerzeurger is interesting. Before entering, a mask is given you, and a bottle of condensed oxygen, so as to enable you not to inhale the atmosphere loaded with germs. In tones muffled by the need to speak within the mouth-piece, you learn that to the left is a tubercular potato, its surface gray with the potencies of countless deaths. Near it the bacillus of gonorrhœa flourishes on the cut surface of the succulent beet, beside the ruddy germs of syphilis. Scarlet fever infests this potato, diphtheria that. The new bacteria of pneumonia flourishes on a boiled watermelon; and glanders, cholera, small-pox, and hydrophobia spread in tiny greenish growths over the little gardens of gelatine. For a moment, in my interest, I displaced my mask. The professor instantly seized me and hurried me from the room. "What a risk!" he said; "my last assistant did as you did, and died in seven days of acute phthisis, with symptoms of hydrophobia and whooping-cough, combined in horrible equality." I did not desire to reënter this box of Pandora. In adjoining apartments of less size are the experimental cultivations, those which are still in doubt. Among the most interesting is the micrococcus of gout, found to flourish best upon gelatinized turtle soup.

A most striking practical result has grown out of some of Coccisclächter's and Keimerzeurger's later researches. They have been able to show that the bacterium of colic flourishes on the green apple, which accounts for the gripes experienced by youthful gourmands. But far more remarkable is the fact that certain micrococci and bacteria die, as proved by Coccisclächter, in some culture materials, and thrive, as shown by Keimerzeurger, on others. Thus the tubercle bacilli flourish on boiled cabbage (Keimerzeurger), but perish on moist sauer-kraut (Coccisclächter), so that by a persistent diet of the latter article they have been able to saturate some of their devoted assistants up to the point of insusceptibility, a discovery which will, we trust, put an end to the cavils at the failure of these researches to yield practical results.

Most startling of all is Herr Keimerzeurger's latest result. He has been able to show that the inconvenient monthly sickness known as the menstrual flow is a non-essential of female life, and is due to a peculiar bacillary growth. It is at once and for many months destroyed by the growth of the bacterium virilis, long misapprehended as the spermatozoid. This latest discovery has been received with derision in France, but Hahn has given it his support, and in my next I shall report his confirmatory experiments.

RIECHSCHWAMM,
First Assistant to Dr. Hahn.

NEWS ITEMS.

PORTLAND, MAINE.

(From our Special Correspondent.)

ALUMNI ASSOCIATION OF THE GRADUATES OF THE MAINE MEDICAL SCHOOL.—For some months past there has been a growing sentiment among the graduates of

the Medical School of Maine in favor of the organization of an association, to renew old associations and advance the interests of medical education in this State. January 30th, some twenty or more, from all sections of the State, met at Waterville, and organized under the name of the "Bowdoin Medical Alumni Association." A constitution was adopted and officers elected. Any person on whom a medical degree has been conferred by Bowdoin College is eligible to membership on paying the required fee, provided that his character and professional standing be satisfactory to the executive committee. Officers are to be elected at the annual meeting, which will occur during the week of the close of the school at Brunswick. Expenses are to be met by assessments, but no money of the Association can be used to pay for refreshments, a clause which may be a good test of future interest in the Association on the part of members.

Officers were elected as follows:

President.—Frederick C. Thayer, M.D., of Waterville, Class of 1867.

First Vice-President.—Sumner Laughton, M.D., of Bangor, Class of 1834.

Second Vice-President.—R. D. Bibber, M.D., of Bath, Class of 1871.

Secretary and Necrologist.—Charles D. Smith, M.D., of Portland, Class of 1879.

Treasurer.—Frederick H. Gerrish, M.D., of Portland, Class of 1869.

The next meeting will be held at Brunswick during the last week in May next. A banquet will be served, and an address delivered by Dr. A. J. Fuller, of Bath, Class of 1841.

Much enthusiasm was manifested by those present. Many were present from distant parts of the State, the eldest, Dr. S. M. Bradbury, of the Class of 1831, travelling the greatest distance. Dr. Thayer, of Waterville, reported that circular letters had been sent to nearly four hundred graduates, and replies expressing interest and coöperation in the movement received from a very large proportion of this number. The friends of the School see in this movement renewed efforts to keep up its present good name, and the indications of hearty aid and support in definite shape from the physicians it has educated during its sixty odd years of existence.

MONTREAL.

(From our Special Correspondent.)

DOCTORS AT LAW.—The case of Dr. Severin Lachapelle *versus* Dr. F. W. Campbell *et al.*, at present before the Superior Court in this city, is exciting a good deal of interest in the profession. About two years ago an editorial appeared in *L'Union Medicale*, entitled "Fiat lux," in which it was stated that some four or five French Canadian medical students had received a private examination from the faculty of one of the medical schools of Montreal, and had received certificates which would be accepted in the United States. This, of course, is contrary to the law of the Province, which places the supervision of the college examinations in the Provincial Medical Board, which body appoints assessors to be present at, and who report on the character of, the examinations. In the editorial enough was said to make the members of the Medical Faculty of Bishops Col-

lege feel that their institution was referred to; and a criminal action for libel was brought against the proprietors of *L'Union Medicale*. The Grand Jury threw out the bill, and the present action is brought by the editors of that journal against Dr. Campbell and other members of his school for damages alleged to have been sustained by bringing a criminal action against them.

There can be no doubt that the editors of *L'Union Medicale* did not exceed their normal privileges in the editorial "Fiat lux," believing, as they did, in the genuineness of the certificates possessed by the young men, which were signed by Dr. F. W. Campbell as Registrar of the Bishops College School. But it appears that none of the members of this school know anything of such a private examination, and the certificates are believed to be forgeries. If this is the case, it is a great pity that the matter could not be amicably arranged, as both parties have been the victims of a fraud. Some advantage may come of it, if the perpetrators of the forgery can be discovered and punished.

PRELIMINARY EDUCATION.—At the last meeting of the Board of Governors of the College of Physicians and Surgeons of Quebec (the Provincial Board), a committee was appointed to confer with the heads of schools and colleges, to arrange, if possible, that the young men presenting themselves for the preliminary examination for permission to enter upon the study of medicine, should be better prepared, and to discuss the causes of the wholesale rejections which have taken place during the past two years. An important conference on the subject took place on the 24th, and the matter was fully discussed. The general opinion was that the examination was not too stringent, but that in certain branches the French students, and in others the English students, were not sufficiently grounded, and it was agreed that for the future greater attention should be paid to these subjects.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—The list of members who have signified their intention of coming out to the Montreal meeting has been received. It includes the names of nearly sixty medical men, among whom are some of the most distinguished members of the profession in Great Britain. Bastian and Schäfer, of University College, London; Struthers and Stirling, of Aberdeen; Foster and MacAlister, of Cambridge; Kendrick, of Glasgow; Morely, of Oxford; A. Milnes Marshall, of Owens College; Cheadle, Pye-Smith, Protheroe Smith, Heywood Smith, W. B. Carpenter, George Harley, Arthur Durham, William Wood, and F. J. Mouat, of London; Lawson Tait, of Birmingham, and many others are expected.

The Canada Medical Association meets in August, in Montreal, a few days before the British Association, and it is hoped that a number of these gentlemen will be present.

YELLOW FEVER NOTES.—Sanitary Inspector Burgess, stationed at Havana, reports four hundred and eighty-two deaths from all causes during the month of January, thirty of which were from yellow fever, six from typhoid fever, nine from pernicious fever, and two from diphtheria. Of those who died from yellow fever, twenty-

five were among the shipping and private individuals in the city, the remaining five among the army and navy.

During the same month last year there were fourteen deaths from yellow fever. An absence of hurricanes and high winds is noted.

His weekly reports show that he disinfects all vessels taking on or discharging cargoes at suspicious wharves, if bound to any port in the United States south of Hatteras.

Reports from Rio de Janeiro state that smallpox is more fatal just now than yellow fever. For the two weeks ending January 5th there were eighteen deaths from smallpox, and but fourteen from yellow fever.

THE PUBLIC HEALTH COMMITTEE OF THE HOUSE.—At the last meeting of the Public Health Committee of the House of Representatives, the Secretary of the National Board of Health made a wordy personal attack upon the Surgeon-General of the Marine-Hospital Service, and the Executive Committee of the National Board apparently concurred in his charge that Surgeon-General Hamilton had been "injudicious, unskilful, and unsuccessful in his quarantine work," and that "in his efforts to control public and official opinion he had been guilty of misrepresentation."

Surgeon-General Hamilton, not having been invited to appear before the Committee, was not present, but we are informed that he will claim the right to a hearing, to justify the action of the Marine-Hospital Service.

CHOLERA.—Fifty-four deaths from cholera occurred at Calcutta during the two weeks ending December 15, 1883.

VIVISECTION IN GERMANY.—The *Deutsche med. Wochenschrift* for December 19th announces that the Prussian Government, in anticipation of the renewal of the discussion on the question of limiting the practice of vivisection, which is to take place during the present session of the Parliament, has issued a circular to the medical faculties of all the Prussian universities, requesting a statement of their opinions on the question. This calls to mind the fact that on the occasion of the interpellation which took place last session, a distinguished physiologist resolved to exhibit to the ministry, in a striking and graphic manner, the relation which vivisection bears to the progress of physiology. Taking the last edition of *Hermann's Manual*, he scored all the well-founded facts which could never have been firmly established without the aid of vivisection. When he had done with the book, it very much resembled in appearance a liberal political journal which had been submitted, in the worst times, to a Russian censor—the passages struck out, exceeding in number those that were allowed to remain in.—*Med. Times and Gazette*, January 19, 1884.

HEALTH IN MICHIGAN.—Reports to the State Board of Health for the week ending February 2, 1884, indicate that consumption, erysipelas, and remittent fever have increased, and that diarrhoea, intermittent fever, typhoid fever, and typho-malarial fever have decreased in area of prevalence.

Compared with the average for the month of January in the preceding six years, neuralgia was more preva-

lent, and diphtheria, rheumatism, typho-malarial fever, bronchitis, scarlet fever, consumption, pneumonia, and remittent fever were less prevalent in January, 1884.

Including reports by regular observers and others, diphtheria was reported present during the week ending February 2, and since, at eighteen places, scarlet fever at thirteen places, and measles at seven places.

NOTES AND QUERIES.

AIR IN THE VEINS AS A CAUSE OF SUDDEN DEATH AFTER LABOR.

To the Editor of THE MEDICAL NEWS.

SIR: IN THE MEDICAL NEWS of November 10, 1883, is an editorial entitled, "Air in the Veins as a Cause of Sudden Death in Puerperal Women." It having been my misfortune to attend a young lady a short time previously, whose sudden death had created a gloom and cast a shadow over the community by whom she was universally beloved, and not being able to offer any satisfactory explanation of the causes of her death until I read the article alluded to, I have thought a short description of the case might prove of interest to some of your readers.

This young lady had been under my care from the beginning of her pregnancy, and there had been nothing unusual or any symptom to indicate any untoward termination of the pregnancy. Her general health had been good, her figure, as far as I could judge externally, was perfect, and there was no reason to anticipate the disastrous result. I was called to her about two o'clock on the morning of the 29th of August, and upon examination found the bag of waters unbroken, and the labor proceeding as naturally as possible. The membranes were ruptured after they had done their part, and the child was born about five o'clock A.M. The placenta was not retained more than a half hour, and was thrown off under the influence of ergot, which contracted the uterus firmly.

Three-quarters of an hour afterwards, whilst I was superintending the dressing of the child, the mother called to me, and said she felt very faint and badly. Immediately the idea of hemorrhage occurred to me, and I placed my hand upon the uterus, which, to my surprise, I found firmly contracted, so that there could be no hemorrhage, and upon vaginal examination could detect none. Upon removing the pillows, and administering stimulants, she apparently revived, and said she felt better. In the course of a half hour the same thing recurred, and although I administered stimulants freely, both hypodermatically and by the mouth, she did not revive, but gradually sank, her pulse becoming weaker and weaker, her breathing more and more oppressed, the lividity of countenance increasing gradually as the heart failed, until, eventually, about half past nine o'clock, she sank, unconsciously and peacefully, into the arms of Death—apparently as if some power had been controlling and compressing the heart until it could no longer act, but quietly ceased to struggle. There were no convulsions, no hemorrhage except that which is met with in every case of labor, but only a gradual cessation of the impulse of the heart.

I could arrive at no definite conclusion as to the cause of death, and was unable to answer the question when asked me, "Why she had died?" I was aware of Dr. Meigs's "Heart-clot Theory," and also of the symptoms of thrombosis; but, as you state in your editorial, "these are causes of rapid, rather sudden death," and I could not satisfy myself that those causes entered into the case; in fact, until I read your article, I was at a loss. Since reading it, I feel confident that the condition you describe is the explanation of the death; and I write this in the hope that it may be of assistance to some one similarly circumstanced. I have been particular in describing the symptoms, so that it may be easier to recognize the trouble, even if we are unable to render any assistance.

Yours respectfully,

R. B. HANAHAN, M.D.

WINNSBORO, S. C., February 5, 1884.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM FEBRUARY 4 TO FEBRUARY 11, 1884.

BARNETT, RICHARDS, *Captain and Assistant Surgeon.*—Granted leave of absence for six months on account of disability.—*Par. 8, S. O. 13, A. G. O.*, January 16, 1884.